

STATE OF ALASKA

**PUBLIC EMPLOYEES'
RETIREMENT FUND
TEACHERS' RETIREMENT FUND**

ANNUAL FINANCIAL REPORT

Steve Cowper, Governor

For the Fiscal Year
July 1, 1986 — June 30, 1987

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT FUND
TEACHERS' RETIREMENT FUND
Fiscal Year 1987

TABLE OF CONTENTS

	<u>Page Numbers</u>
<u>INTRODUCTORY SECTION:</u>	
Commissioner's Letter	1
Director's Letter	2-4
Investment Comments by Department of Revenue	5-6
Combined Balance Sheet	7
<u>PUBLIC EMPLOYEES' RETIREMENT SYSTEM:</u>	
Board Members	8
Auditor's Report and Financial Statements	9-19
Actuarial Status	20-29
Comparative Statement of Operations	30-36
Benefit Payments Breakdown	37
FY 1987 Income and Receipts	38
FY 1987 Disbursements	39
Historical Data	40-42
Employer Contribution Rates	43-45
<u>TEACHERS' RETIREMENT SYSTEM:</u>	
Board Members	46
Auditor's Report and Financial Statements	47-57
Actuarial Status	58-68
Comparative Statement of Operations	69-70
FY 1987 Income and Receipts	71
FY 1987 Disbursements	72
Historical Data	73-75
Employer Contribution Rates	76-77
<u>INVESTMENTS:</u>	
Public Employees' Retirement System	78-87
Teachers' Retirement System	88-97

INTRODUCTORY SECTION

Prepared by
Department of Administration
Division of Retirement and Benefits

STATE OF ALASKA

DEPARTMENT OF ADMINISTRATION

OFFICE OF THE COMMISSIONER

STEVE COWPER, GOVERNOR

POUCH C (MS 0200)
JUNEAU, ALASKA 99811
PHONE: (907) 465-2200

December 18, 1987

The Honorable Steve Cowper
Governor of Alaska
P.O. Box A
Juneau, AK 99811

Dear Governor Cowper:

It is my pleasure to submit to you the Annual Report of the Alaska Public Employees' Retirement System (PERS) and Teachers' Retirement System (TRS).

This report shows the financial condition of both the PERS and TRS funds as of June 30, 1987. It has been prepared on the basis of standards set forth by the National Council on Governmental Accounting and is submitted in accordance with the requirements of Alaska Statutes 39.35.020(5) (PERS) and 14.25.030(4) (TRS).

Sincerely,



John M. Andrews
Commissioner

JMA/cam/4
Enclosure

STATE OF ALASKA

DEPARTMENT OF ADMINISTRATION

DIVISION OF RETIREMENT & BENEFITS

PLEASE REPLY TO:

☐ P.O. BOX CR
JUNEAU, ALASKA 99811-0203
PHONE: (907) 465-4460

☐ 2600 DENALI ST. SUITE 401
ANCHORAGE, ALASKA 99503-2740
PHONE: (907) 277-7504

Public Employees' Retirement System
Teachers' Retirement System
Judicial Retirement System
Elected Public Officers Retirement System
National Guard Retirement System
Territorial Retirement System
Retirees' Voluntary Dental-Vision-Audio Plan
Supplemental Benefits System
Group Health/Life Insurance Benefits
Deferred Compensation Plan
Public Employers Social Security Contributions

STEVE COWPER, GOVERNOR

December 18, 1987

Commissioner John M. Andrews
Department of Administration
P.O. Box C
Juneau, AK 99811-0200

Dear Commissioner Andrews:

I am pleased to submit to you the Annual Report of the Public Employees' (PERS) and Teachers' (TRS) Retirement Systems. The information presented in this report shows the results of operations and the financial condition of the two retirement funds for the fiscal year ending June 30, 1987. The financial statements in this report are presented on the accrual basis of accounting in accordance with the Financial Accounting Standards Board, Standard No. 35.

The report contains the financial statements, the audit report from the professional accounting firm of Peat, Marwick, Main and Company, and excerpts from the most recent actuarial valuations prepared by the system's actuary, William M. Mercer-Meidinger-Hansen, Inc. Also included are the fiscal year investment comments from the Division of Treasury, Department of Revenue, which is charged with the investment of the retirement funds.

The June 30, 1987, net assets available for benefits were \$2,010,195,776 for the PERS, an increase of 15.5 percent over the previous year; and \$1,303,464,050 for the TRS, an increase of 14.2 percent over the previous year.

The graphs on pages 41 and 42 (PERS) and pages 74 and 75 (TRS) demonstrate the increases in total assets and benefits paid in recent years. Additional information for the fiscal years ending June 30, 1985, through June 30, 1987, is provided in the following table:

	FY 1987		FY 1986		FY 1985	
	<u>PERS</u>	<u>TRS</u>	<u>PERS</u>	<u>TRS</u>	<u>PERS</u>	<u>TRS</u>
Number of participating employers (reporting entities)	117	62	112	61	105	59
Number of participating members	26,802	7,810	27,643	8,824	27,183	8,684

	FY 1987		FY 1986		FY 1985	
	<u>PERS</u>	<u>TRS</u>	<u>PERS</u>	<u>TRS</u>	<u>PERS</u>	<u>TRS</u>
Number of retired members	5,668	2,401	4,657	2,098	4,317	2,022

	FY 1987		FY 1986		FY 1985	
	<u>PERS</u>	<u>TRS</u>	<u>PERS</u>	<u>TRS</u>	<u>PERS</u>	<u>TRS</u>
Average Annual Retirement Benefit	\$11,073	\$19,716	\$10,068	\$18,504	\$10,032	\$18,408

Average Annual Medical Benefit	\$1,980	\$1,980	\$2,100	\$2,100	\$2,302	\$2,302
--------------------------------	---------	---------	---------	---------	---------	---------

The fall 1986 PERS and TRS Board meetings were held in Anchorage and the spring 1987 meetings were held in Juneau. The annual actuarial valuations and employer contribution rates were approved by the PERS Board at a special meeting in January 1987 and the TRS Board at the regular spring meeting.

The following legislation affecting the retirement systems passed during the 1987 legislative session:

- ° Chapter 21, SLA 1987 (SB 139), amended the PERS conditional service retirement benefits provision (AS 39.35.385(f)) to require legislative employees hired after May 30, 1987, to have at least 80 days of credited service (instead of 60) during each of five legislative sessions to qualify for a conditional benefit when they reach retirement age.
- ° Chapter 64, SLA 1987 (HB 215), added a provision to allow a PERS member to claim PERS credit for leave without pay (LWOP) due to occupational causes if the LWOP occurred after June 12, 1987, and the member received workers' compensation during the LWOP.
- ° Chapter 91, SLA 1987 (CSHB 126), amended AS 14.25.070 and repealed AS 14.25.080 which required the State to pay one-half of the TRS retirement contributions, excluding the employees' share, necessary to actuarially fund the TRS. This legislation provided for another method of State funding under the public school foundation program.

December 18, 1987

A copy of this report will be mailed to all PERS and TRS employers. The cooperation of those employers is essential to the successful operation of the system.

Sincerely,

A handwritten signature in cursive script that reads "Robert F. Stalnaker".

Robert F. Stalnaker
Acting Director

RFS/jmp
Enclosure

STATE OF ALASKA

DEPARTMENT OF REVENUE

TREASURY DIVISION

STEVE COWPER, GOVERNOR

ELEVENTH FLOOR
STATE OFFICE BUILDING
P.O. BOX 58
JUNEAU, ALASKA 99811-0400

November 24, 1987

Commissioner Hugh Malone
Department of Revenue
Juneau, AK 99811

Dear Commissioner Malone:

The combined market value of the Public Employees and the Teachers Retirement Systems' investments rose to \$3.319 billion on June 30, 1987, an increase of \$490 million during fiscal year 1987 and a doubling of asset size over the last three years. The unusually large increase in the market value of the assets is the direct result of relatively high investment returns, which averaged 20.9 percent per year over the last three years and accounted for 81 percent of the asset value increase. During the three year long period the equity investments have yielded 26.2 percent per year and the fixed income investments have yielded 18.2 percent per year. Both of those yields are exceptionally high by historical standards--almost twice the normal level--and it is reasonable to expect that they will be partially offset by lower returns over the next few years.

The fiscal year 1987 investment returns constituted 22 percent of the total three year increase in asset values, a slower pace than the first two years but better than we expected at the beginning of the year. While equities continued to be the best performer, yielding 20.3 percent during the year, fixed income yields fell to 4.5 percent as market values declined in response to rising interest rate levels. The lower market value returns on fixed income investments is not significant for the systems because it does not affect the actuarial evaluation of the systems' assets. The actuarially calculated return on the fixed investments was 10.6 percent for FY 1987 and averaged 11.2 percent per year over the last three years. The assumed rate of return utilized by the actuary is 9 percent per annum, substantially below their calculated return on our total investments of more than 16 percent per year over the three year period. Because the calculated returns are so much higher than the assumed returns, the retirement systems have a comfortable cushion which can absorb a couple of years of relatively low investment returns without requiring any increase in the current level of contributions. Although the

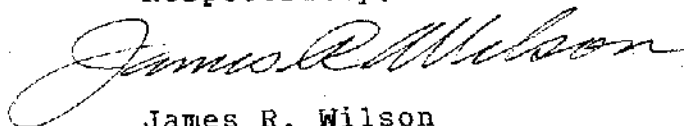
Commissioner Hugh Malone
November 24, 1987
Page 2

actuary's final report has not been received, it will probably show that both of the retirement systems ended the year with a funded ratio of more than 100 percent, a rare achievement for state retirement systems in the United States.

We do not expect comparably high market value returns for the current fiscal year of 1988. Domestic common stock prices, which by many calculations have been over-valued for more than the past year, dropped precipitously in October and are now at more reasonable valuation levels. Although the lower current prices provide a sounder basis for expecting better returns on equity investments over the next few years, the current fiscal year will bear the brunt of the revaluation and, consequently, equity returns are expected to be relatively poor this year. On the other hand, fixed income investment returns should improve this year if the current decline in interest rate levels continues.

The many employers and employees who participate in the state retirement systems should find it reassuring to know that, despite the widespread financial problems within the State, their entrusted retirement funds are now financially stronger and more fully capable than ever before of meeting the obligation to pay current and future retirement benefits.

Respectfully,



James R. Wilson
Chief Investment Manager
Portfolio Management Section

JRW/gb

STATE OF ALASKA
RETIREMENT FUNDS
Combined Balance Sheet
June 30, 1987
(In Thousands)

<u>ASSETS</u>	<u>Total</u>	<u>Public Employees'</u> <u>Retirement Fund</u>	<u>Teachers'</u> <u>Retirement Fund</u>
Investments, at fair value:			
Short-term investments	\$ 8,500	\$ 5,700	\$ 2,800
United States Government securities	1,181,605	735,633	445,972
Corporate bonds, notes and debentures	295,614	179,176	116,438
Common stocks	997,532	604,931	392,601
Foreign stocks	337,820	203,400	134,420
Real estate equity funds	193,078	117,480	75,598
Total investments	<u>\$3,014,149</u>	<u>\$1,846,320</u>	<u>\$1,167,829</u>
Loans and mortgages, at cost	<u>\$ 246,547</u>	<u>\$ 134,126</u>	<u>\$ 112,421</u>
Receivables:			
Contributions	\$ 12,661	\$ 4,726	\$ 7,935
Accrued interest and dividends	34,803	21,615	13,188
Total receivables	<u>\$ 47,464</u>	<u>\$ 26,341</u>	<u>\$ 21,123</u>
Cash in interest-bearing accounts	<u>\$ 9,485</u>	<u>\$ 5,468</u>	<u>\$ 4,017</u>
Total assets	<u>\$3,317,645</u>	<u>\$2,012,255</u>	<u>\$1,305,390</u>
Liability - accrued expenses	<u>3,985</u>	<u>2,059</u>	<u>1,926</u>
Net assets available for benefits	<u>\$3,313,660</u>	<u>\$2,010,196</u>	<u>\$1,303,464</u>

PUBLIC EMPLOYEES' RETIREMENT SYSTEM

STATE OF ALASKA

PUBLIC EMPLOYEES' RETIREMENT SYSTEM

BOARD MEMBERS

<u>NAME</u>	<u>TERM EXPIRES</u>
C.R. "STEVE" HAFLING, CHAIRMAN	JULY 20, 1990
JAMES P. WELLINGTON, VICE-CHAIRMAN	MARCH 7, 1990
BEN HUMPHRIES	JUNE 20, 1988
MARLENE A. JOHNSON	JUNE 20, 1992
MARY A. NOTAR	MARCH 7, 1990

KPMG Peat Marwick

Certified Public Accountants

Peat Marwick Main & Co.

601 West Fifth Avenue, Suite 700
Anchorage, AK 99501

Division of Retirement and Benefits and
Members of the Alaska Public Employees' Retirement Board
State of Alaska Public Employees' Retirement System:

We have examined the statements of net assets available for benefits of the State of Alaska Public Employees' Retirement System as of June 30, 1987 and 1986, and the related statements of changes in net assets available for benefits for the years then ended and the statement of accumulated plan benefits as of June 30, 1986. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the financial statements referred to above present fairly the financial status of the Plan as of June 30, 1986, and the changes in its financial status for the year then ended and information regarding net assets available for benefits and changes therein as of and for the years ended June 30, 1987 and 1986, in conformity with generally accepted accounting principles applied on a consistent basis.

Peat Marwick Main & Co.

September 15, 1987

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Statements of Net Assets Available for Benefits

June 30, 1987 and 1986

(in thousands)

	<u>1987</u>	<u>1986</u>
Assets:		
Investments, at fair value:		
Short-term investments	\$ 5,700	34,900
United States Government securities	735,633	583,492
Corporate bonds, notes and debentures	179,176	200,108
Common stocks	604,931	439,869
Foreign stocks	203,400	110,223
Real estate equity funds	117,480	97,994
Financial futures	-	1
Total investments	<u>1,846,320</u>	<u>1,466,587</u>
Loans and mortgages, at cost, net of allowance for loan losses of \$4,221 in 1987	<u>134,126</u>	<u>237,782</u>
Receivables:		
Contributions	4,726	4,936
Accrued interest and dividends	21,615	19,821
Total receivables	<u>26,341</u>	<u>24,757</u>
Cash in interest-bearing accounts	5,468	11,942
Total assets	<u>2,012,255</u>	<u>1,741,068</u>
Liability - accrued expenses	<u>2,059</u>	<u>1,225</u>
Net assets available for benefits	\$ <u>2,010,196</u>	<u>1,739,843</u>

See accompanying notes to financial statements.

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Statements of Changes in Net Assets Available for Benefits

Years ended June 30, 1987 and 1986

(in thousands)

	<u>1987</u>	<u>1986</u>
Additions:		
Investment income:		
Net appreciation (depreciation) in fair value of investments (note 5)	\$ (27,799)	159,873
Interest	108,556	112,258
Dividends	13,571	10,948
Net realized gains on sale	107,886	58,934
Total investment income before provision for losses on loans and mortgages	202,214	342,013
Provision for losses on loans and mortgages	4,221	-
Net investment income	<u>197,993</u>	<u>342,013</u>
Contributions:		
State of Alaska and other employers	103,719	127,727
Employees	51,879	42,626
Total contributions	<u>155,598</u>	<u>170,353</u>
Total additions	<u>353,591</u>	<u>512,366</u>
Deductions:		
Benefits paid:		
Retirement	57,473	45,916
Medical	10,256	9,411
Total benefits paid	<u>67,729</u>	<u>55,327</u>
Refunds to terminated employees	10,524	9,165
Administrative expenses	4,985	3,567
Total deductions	<u>83,238</u>	<u>68,059</u>
Net increase	270,353	444,307
Net assets available for benefits:		
Beginning of year	<u>1,739,843</u>	<u>1,295,536</u>
End of year	\$ <u>2,010,196</u>	<u>1,739,843</u>

See accompanying notes to financial statements.

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Statement of Accumulated Plan Benefits

June 30, 1986

(in thousands)

Actuarial present value of accumulated benefits:

Vested benefits:

Participants currently receiving payments	\$ 415,115
Other participants	<u>939,011</u>
Total vested benefits	<u>1,354,126</u>

Nonvested benefits

383,736

Total actuarial present value of accumulated benefits	\$ <u>1,737,862</u>
---	---------------------

At June 30, 1985, the total actuarial present value of accumulated benefits was \$1,358,615. During the year ended June 30, 1986, the actuarial present value of accumulated plan benefits increased \$125,094 as a result of changes in the actuarial assumptions (notes 3 and 6).

See accompanying notes to financial statements.

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Notes to Financial Statements

June 30, 1987 and 1986

(1) Description of State of Alaska Public Employees' Retirement System (Plan)

The following brief description of the Plan is provided for general information purposes only. Participants should refer to the Plan agreement for more complete information.

General

The Plan is a joint-contributor plan created by State of Alaska Statutes effective January 1, 1961. The Plan was established to encourage qualified personnel to enter and remain in the service of the State, political subdivision or public organization of the State. Inclusion in the Plan is a condition of employment for State of Alaska employees except as otherwise provided for elected officers. A municipality or other political subdivision of the State may request to become an employer in this system.

Pension Benefits

Employees hired prior to July 1, 1986 with five or more years of credited service are entitled to annual pension benefits beginning at normal retirement age 55 or early retirement age 50. For employees hired after June 30, 1986, the normal and early retirement ages are 60 and 55, respectively. The normal annual pension benefit is equal to 2% of the member's highest three-year average monthly compensation for the first ten years of service, 2-1/4% for the second ten years of service and 2-1/2% for the third ten years of service. All service earned prior to July 1, 1986 will be calculated using the 2% multiplier. Employees with 30 or more years of credited service (20 years for peace officers and firemen) may retire at any age and receive a normal benefit. Employees retiring prior to January 1, 1987 may elect to receive their pension benefits in the form of a joint and survivor annuity. Beginning January 1, 1987, new retirees must receive their benefits in the form of a joint and survivor annuity unless the member's spouse agrees to another form of benefit. Minimum benefits for employees eligible for retirement are \$25 per month for each year of credited service. Major medical benefits are provided without cost to all members first hired before July 1, 1986. Members first hired after June 30, 1986 may elect major medical benefits.

Retirement Incentive Program

Legislation passed in May 1986 established a retirement incentive program designed to encourage eligible employees to voluntarily retire in order to reduce personnel service costs. The program was available to eligible State of Alaska employees until June 30, 1987, eligible University of Alaska employees from October 1, 1986 to September 30, 1987, and all other members from January 1, 1987 to December 31, 1987.

(Continued)

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Notes to Financial Statements

The Plan is to be reimbursed by the participating agency or employer of the program within three years after the end of the fiscal year in which a member retires. The amount of reimbursement is the actuarial equivalent of the difference between the benefits the member receives after the addition of the retirement incentive under the program and the amount the member would have received without the incentive, less any amount the participant has paid as part of retiring under the program. Participating peace officers or firemen are indebted 15% and all other members 12.75% of their annual compensation for the calendar year in which the member terminates employment to participate in the program. An outstanding indebtedness at the time a participant is appointed to retirement will result in an actuarial adjustment to his/her benefit.

The effect of the retirement incentive program on the actuarial present value of accumulated benefits or the related contributions due from employers and employees electing to fund their early retirement has not been determined.

Death and Disability Benefits

If an active employee dies from occupational causes, the employee's spouse or dependent children receive a monthly pension from the Plan. The amount of the pension changes on the date the employee's normal retirement would have occurred if the employee had lived. The new benefit is based on the employee's average base salary at the time of his/her death and the credited service that would have occurred had the employee lived and continued to work until normal retirement date. Nonoccupational death benefits are paid based on years of service and would consist of either a lump-sum benefit or a joint and survivor option. Active employees who become permanently disabled due to an occupational injury receive disability payments until normal retirement age. At normal retirement age the disabled participants begin receiving normal retirement benefits computed as though they had been employed to normal retirement age with their annual compensation remaining the same as at the time they became disabled.

(2) Summary of Significant Accounting Policies

Valuation of Investments

Investments, other than real estate equity funds and loans and mortgages, are carried at market value to reflect their asset values as determined by the last quoted market price at June 30, 1987 and 1986.

Real estate equity funds are stated at estimated market value as determined by the independent management of the investment accounts. These investments do not have a readily available market and generally represent long-term investments.

(Continued)

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Notes to Financial Statements

Loans and mortgages are serviced by the institution from which the loan is purchased. The policy of the Plan is to hold these investments until maturity and, accordingly, the investments are stated at cost, less an allowance for estimated loan losses. Loans and mortgages include approximately \$5,443,000 and \$2,183,000 for 1987 and 1986, respectively, of other real estate owned. Other real estate owned represents properties on which the Plan has foreclosed and is holding with the intent to resell.

The Commissioner of Revenue has the statutory authority to invest the moneys of the Plan. This authority is delegated to investment officers of the treasury division of the Department of Revenue. Alaska Statute provides for the investment in United States Treasury or agency securities; corporate debt securities; preferred and common stock, commercial paper; securities of foreign governments, agencies and corporations; foreign time deposits, gold bullion; futures contracts for the purpose of hedging; real estate investment trusts; deposits within Alaska savings and loans and mutual savings banks; deposits with state and national banks in Alaska, guaranteed loans; notes secured by mortgages; certificates of deposit and banker's acceptances.

The Plan's deposits and investments are categorized below pursuant to the Governmental Accounting Standards Board (GASB) Statement No. 3 and GASB Technical Bulletin No. 87-1 to give an indication of the level of safekeeping risk assumed by the Plan at June 30, 1987.

Deposits:

- Category 1. Insured or collateralized with securities held by the state or its custodian in the state's name.
- Category 2. Collateralized with securities held by the pledging financial institution's trust department or custodian in the state's name.
- Category 3. Uncollateralized.

Investments:

- Category 1. Insured or registered for which the securities are held by the state or its custodian in the state's name.
- Category 2. Uninsured and unregistered investments for which the securities are held by the broker's or dealer's trust department or agent in the state's name.

(Continued)

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Notes to Financial Statements

Category 3. Uninsured and unregistered investments for which the securities are held by the broker's or dealer's trust department or agent but not in the state's name.

	Category (in thousands)			Carrying value	Market value of securities
	<u>1</u>	<u>2</u>	<u>3</u>		
Deposits - cash	\$ 5,468	-	-	5,468	5,578
Investments:					
Repurchase agreements	5,700	-	-	5,700	5,815
U.S. Government securities	735,633	-	-	735,633	735,633
Corporate bonds	179,176	-	-	179,176	179,176
Common stocks	604,931	-	-	604,931	604,931
Foreign stocks	-	203,400	-	203,400	203,400
Real estate equity funds	117,480	-	-	117,480	117,480
	<u>\$ 1,648,388</u>	<u>203,400</u>	<u>-</u>	<u>1,851,788</u>	<u>1,852,013</u>

Treasury investment policy requires that securities underlying the repurchase agreements must have a minimum market value of 102% of the cost of the repurchase agreement. There were no violations of this policy during the dates covered by this statement.

Contributions Receivable

Contributions from employees and employers for service through June 30 are accrued. These contributions are considered fully collectible and, accordingly, no allowance for uncollectible receivables is considered necessary.

Investment Income Receivable

Investment income receivable represents amounts earned but not yet received as of June 30. These amounts are considered fully collectible and, accordingly, no allowance for uncollectible receivables is considered necessary.

(Continued)

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Notes to Financial Statements

(3) Actuarial Present Value of Accumulated Benefits

Accumulated benefits are those future periodic payments, including lump-sum distributions, that are attributable under the Plan's provision to the service employees have rendered. Accumulated benefits include benefits expected to be paid to retired or terminated employees or their beneficiaries, beneficiaries of employees who have died, and present employees or their beneficiaries. Benefits under the Plan are based on employees' compensation during their highest three years of credited service. The accumulated benefits for active employees are based on their average compensation during the three years ending on the date that the benefit information is presented (the valuation date). Benefits payable under all circumstances--retirement, death, disability, and termination of employment--are included, to the extent they are deemed attributable to employee service rendered to the valuation date.

The actuarial present value of accumulated benefits is determined by an actuary from William M. Mercer-Meidinger Incorporated and is that amount that results from applying actuarial assumptions to adjust the accumulated benefits to reflect the time value of money (through discounts for interest) and the probability of payment (by means of decrements such as for death, disability, withdrawal, or retirement) between the valuation date and the expected date of payment. The significant actuarial assumptions used in the valuations as of June 30, 1986 are as follows:

- a. Actuarial cost method - projected unit credit, unfunded accrued benefit liability amortized over 25 years, funding surplus amortized over 5 years.
- b. Mortality basis - 1984 Unisex Pension Mortality Table set back one and one-half years.
- c. Retirement age - retirement rates based on actual experience.
- d. Interest rate - 9% per annum, compounded annually, net of investment expenses.
- e. Health cost inflation - 9% per annum.
- f. Salary scale - increase of 6.5% for the first five years of employment and 5.5% per year thereafter.
- g. Cost of living allowance (domicile in Alaska) - 69% of those receiving benefits will be eligible to receive the cost of living allowance.

(Continued)

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Notes to Financial Statements

- h. Contribution refunds - 100% of those terminating after age 35 with five or more years of service will leave their contributions and thereby retain their deferred vested benefit. All others who terminate are assumed to have their contributions refunded.
- i. Asset valuation - three-year average ratio between market and book values of assets.

Turnover and disability assumptions are based upon actual historical occurrence rates of the Plan. The foregoing actuarial assumptions are based on the presumption that the Plan will continue. Were the Plan to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated benefits.

(4) Funding Policy

Employees' Contributions

Prior to January 1, 1987, employees contributed 4-1/4% of their compensation, except for peace officers and firemen, who contribute 5% of their compensation to the Plan. Beginning January 1, 1987, contribution rates increased to 7.5% for peace officers and firemen and 6.75% for other employees. Present employees' accumulated contributions at June 30, 1987 were \$275,238,000. Contributions are collected by employers and remitted to the Plan.

Employer Contribution

Employer contributions vary and are determined annually on an actuarial basis for each employer.

(5) Investments

During 1987 and 1986, the Plan's investments (including investments bought, sold, as well as held during the year) appreciated (depreciated) in value as follows:

	<u>1987</u>	<u>1986</u>
United States Government securities	\$ (34,394)	71,894
Corporate bonds, notes and debentures	(4,984)	4,805
Common stocks	(254)	60,758
Foreign stocks	1,661	23,152
Foreign bonds	-	(1,403)
Real estate equity funds	10,172	667
	\$ <u>(27,799)</u>	<u>159,873</u>

(Continued)

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Notes to Financial Statements

(6) Change in Actuarial Assumptions

Effective July 1, 1986, the Plan adopted new actuarial assumptions. The actuarial method used is the same, however, actuarial funding surpluses are amortized over five years rather than twenty-five years. The assumed rate of interest was increased from 8% to 9% per year. The salary scale assumption was lowered to 6.5% per year for the first five years of employment and 5.5% per year thereafter, down from 8% and 7%, respectively. Health care cost inflation was increased to 9% rather than 8%. Turnover and disability assumptions were revised based on actual experience in 1981 through 1985. The method for determining accumulated Plan benefits was changed to include not only a valuation of retirement benefits but also of deferred vested, death benefits and other ancillary benefits.

(7) Contingent Liabilities

The State of Alaska Public Employees' Retirement System (System) was a party to an action contesting application of the early retirement factors adopted by the System in the calculation of the actuarial present value of the accumulated Plan benefits. The Alaska Supreme Court ruled in 1987 that the System must use the most favorable early retirement factor available when a member begins receiving a monthly benefit. While the suit only specifically addressed early retirement factors, other actuarial retirement factors will also be affected. As a result of the suit, the System's actuary estimates that the actuarial present value of the accumulated Plan benefits will increase by approximately \$50,000,000, which will result in an increase of approximately 1% in the average annual employer contribution rate. The effect of the suit on the amount payable to current retirees as a result of not using the most favorable actuarial retirement factors has not been determined.

HIGHLIGHTS

This report has been prepared by William M. Mercer-Meidinger, Incorporated to:

- (1) present the results of a valuation of the Alaska Public Employees' Retirement System as of June 30, 1986;
- (2) review experience under the plan for the year ended June 30, 1986;
- (3) determine the contribution rates for the State and for each political subdivision of the State;
- (4) provide reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

The report is divided into two sections. Section 1 describes the basis of the valuation. It summarizes the plan provisions, provides information relating to the plan participants, and describes the funding methods and actuarial assumptions used in determining liabilities and costs.

Section 2 contains the results of the valuation. It includes the experience of the plan during the 1985-86 plan year, the current annual costs, and reporting and disclosure information.

The principle results are as follows:

	<u>1985**</u>	<u>1986</u>
Funding Status as of June 30:		
(a) Valuation Assets*	\$1,248,146	\$1,587,599
(b) Present Value of Accrued Benefits*	1,328,964	1,556,610
(c) Accrued Benefit Funding Ratio (a) / (b)	93.9%	102.0%
Contributions for Fiscal Year	<u>1987</u>	<u>1988-89</u>
(a) Consolidated Rate	10.02%	10.37%
(b) Average Past Service Rate	.60%	(.82%)
(c) Average Total Contribution Rate	10.67%	9.55%

* In thousands.

** After change in assumptions.

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions, in conjunction with employee data provided to us by the plan sponsor and financial information provided by Peat, Marwick, Mitchell & Company, to determine a sound value for the plan liabilities. We believe that this value and the method suggested for funding it are in full compliance with the Governmental Accounting Standards Board, the Internal Revenue Code, and all applicable regulations.

Respectfully submitted,

A handwritten signature in cursive script that reads "Robert F. Richardson".

Robert F. Richardson, ASA
Principal

RFR/jam

January 6, 1987

ANALYSIS OF THE VALUATION

Actuarial Method and Assumptions

This actuarial report utilizes the same actuarial method as last year. However, actuarial funding surpluses are amortized over five years rather than 25 in last year's report. An experience analysis was completed in 1986 which led to revisions in the actuarial assumptions. The assumed rate of interest was increased from 8% to 9% per year. The salary scale assumption was lowered to 6.5% per year for the first five years of employment and 5.5% per year thereafter, down from 8% and 7% respectively. We also assumed that health care costs would increase at 9% per year rather than 8% per year. Mortality is now based on a unisex mortality table. In past years we had used sex-based mortality tables for funding purposes only. Based on actual experience in 1981-1985, we revised the turnover disability assumptions as well as calculated retirement rates. We now assume 69% of those receiving retirement benefits will be eligible for C.O.L.A., up from 60%. Bonds are now valued at book value in computing the actuarial value of assets.

Investment Performance

During the 1986 fiscal year, the investment return rate, based upon market values, was more than 25% . . . even higher than last year's record rate of 22%. Based upon the three-year smoothing approach used to determine valuation assets, the return rate during fiscal year 1986 was 17.95%.

This excellent investment performance was a major factor behind the increase in accrued benefit funding ratio from 93.9% to 102%.

Salary Increases

Another important factor affecting costs and liabilities under PERS is the impact of inflation on salary increases. For the third straight year, salary increases on an average were less than the actuarial assumption. As of June 30, 1986, the average annual salary was \$30,200 . . . an increase of 5.3% over the prior year. Accordingly, there were small actuarial gains from less-than-anticipated salary increases which contributed, along with the excellent investment performance, to lower employer contribution rates and the increase in the funding ratio.

Membership Statistics

For the third year in a row, there was a large increase in the average age of the active PERS members. In the last year, however, average age has increased at .56 per year. This phenomenon continues to put upward pressure on costs and liabilities . . . thus dampening the beneficial affects of actuarial gains from investment and salary increases.

Retiree Statistics

There was a large increase in the number of new retirees during FY86, with 448 new benefit recipients added to the pension rolls. Average age at retirement showed a drop of almost half a year. This statistic continues to be volatile, with the average age for service retirements vacillating between 57 1/2 and 59 1/2 for the last several years.

Conclusions

Primarily due to the excellent investment performance during FY86 and the change in actuarial assumptions, employer contribution rates decreased for most political subdivisions. Cost containment measures in the retiree health program, as well as a general slowing of medical inflation, both contributed to actuarial gains from health inflation.

Section 1.6
ACTUARIAL BASIS

Valuation of Liabilities

- A. Actuarial Method - Projected Unit Credit. The unfunded accrued benefit liability is amortized over 25 years. Actuarial funding surpluses are amortized over five years.
- B. Method For Accumulated Plan Benefit Values - The actuarial present value of accumulated plan benefits (the term used for Financial Accounting Standards Board purposes) and present value of vested accumulated benefits are a measure of plan benefits which have been earned to date. These are not only a valuation of retirement benefits, but also of deferred vested, death benefits, and other ancillary benefits. Earnings and service for benefit purposes which are expected to be earned after the valuation date are excluded from these values.

The actuarial assumptions used to determine these values are identical to those used for the funding purposes.

In estimating accumulated benefits, final average compensation is based on compensation data in the possession of the actuary.

C. Actuarial Assumptions -

- | | |
|--------------------------|--|
| 1. Interest | 9% per year, compounded annually, net of investment expenses. |
| 2. Salary Scale | 6.5% per year for the first five years of employment and 5.5% per year thereafter. |
| 3. Health Cost Inflation | 9% per year. |
| 4. Mortality | 1984 Unisex Pension Mortality Table set back 1-1/2 years. |
| 5. Turnover | Based upon the 1981-85 actual total turnover experience. (See Table 1). |
| 6. Disability | Incidence rates in accordance with Table 2. Post-disability mortality in accordance with rates published by the Pension Benefit Guaranty Corporation to reflect mortality of those receiving disability benefits under Social Security. Disabilities are assumed to be occupational 85% of the time for Police/Fire, 35% for "Others". |

- | | |
|-------------------------|---|
| 7. Retirement Age | Retirement rates based on actual experience in accordance with Table 3. |
| 8. Spouse's Age | Wives are assumed to be four years younger than husbands. |
| 9. Contribution Refunds | 100% of those terminating after age 35 with five or more years of service will leave their contributions and thereby retain their deferred vested benefit. All others who terminate are assumed to have their contributions refunded. |
| 10. C.O.L.A. | 69% of those receiving retirement benefits will be eligible for C.O.L.A. |
| 11. Expenses | No loading for expenses. |

Valuation of Assets

Based upon the three-year average ratio between market and book values of the System's assets, except that bonds are carried at book value. Assets are accounted for on an accrued basis.

Valuation of Medical Benefits

Medical benefits for retirees are provided by the payment of premiums from the trust fund. A pre-65 cost and lower post-65 cost (due to Medicare) were assumed such that the total rate for all retirees equals the present premium rate. These medical premiums are then increased with the health inflation assumption. The actuarial cost method used for funding retirement benefits is also used to fund health benefits.

TABLE 1
ALASKA PERS
TOTAL TURNOVER ASSUMPTIONS

Select Rates of Turnover
During the First 10 Years
of Employment

Ultimate Rates of Turnover
After the First 10 Years
of Employment

Police and Fire:

<u>Year of Employment</u>	<u>Age at Hire</u>			<u>Age</u>	<u>Rate</u>
	<u>20-29</u>	<u>30-39</u>	<u>40+</u>		
1	.39	.28	.22	20-29	.03
2	.18	.19	.16	30-45	.02
3	.12	.14	.13	46+	.01
4	.11	.13	.12		
5	.07	.09	.11		
6	.06	.09	.08		
7	.05	.09	.08		
8	.05	.06	.08		
9	.04	.04	.04		
10	.04	.03	.03		

Others:

<u>Year of Employment</u>	<u>Age at Hire</u>			<u>Age</u>	<u>Rate</u>
	<u>20-29</u>	<u>30-39</u>	<u>40+</u>		
1	.34	.26	.20	20-45	.065
2	.26	.21	.15	46+	.05
3	.21	.17	.13		
4	.18	.14	.10		
5	.16	.13	.09		
6	.15	.13	.09		
7	.12	.10	.09		
8	.12	.09	.09		
9	.12	.08	.08		
10	.09	.07	.06		

TABLE 2
ALASKA PERS -
William M. Mercer-Meidinger, Incorporated
DISABILITY RATES
ANNUAL RATES PER 1,000 EMPLOYEES

<u>Age</u>	<u>Police & Fire Rate</u>	<u>"Other" Member Rate</u>
20	.88	.28
21	.89	.28
22	.90	.29
23	.91	.29
24	.93	.30
25	.94	.30
26	.95	.30
27	.98	.31
28	1.00	.32
29	1.03	.33
30	1.05	.34
31	1.08	.34
32	1.10	.35
33	1.13	.36
34	1.16	.37
35	1.20	.38
36	1.24	.40
37	1.29	.41
38	1.34	.43
39	1.39	.44
40	1.44	.46
41	1.50	.48
42	1.59	.51
43	1.70	.54
44	1.85	.59
45	2.03	.65
46	2.20	.70
47	2.39	.76
48	2.59	.83
49	2.79	.89
50	3.00	.96
51	3.25	1.04
52	3.58	1.14
53	3.98	1.27
54	4.44	1.42
55	5.00	1.60
56	5.74	1.84
57	6.68	2.14
58	7.63	2.44
59	9.00	2.88
60	10.54	3.37
61	12.19	3.90
62	14.13	4.52
63	16.31	5.22
64	18.63	5.96

TABLE 3
ALASKA PERS
RETIREMENT RATES

<u>Age</u>	<u>Police & Fire Rate</u>	<u>"Other" Member Rate</u>
50	.17	.06
51	.11	.04
52	.11	.04
53	.12	.04
54	.12	.05
55	.30	.17
56	.21	.15
57	.21	.12
58	.12	.13
59	.12	.16
60	.21	.26
61	.21	.25
62	.25	.43
63	.33	.63
64 & Up	1.00	1.00

For ages less than 50, employees are assumed to retire two years after the earliest age they are eligible to retire.

Section 2.3(c)
DEVELOPMENT OF AVERAGE EMPLOYER CONTRIBUTION RATE - FY88 & FY89
ALL MEMBERS
TOTAL SYSTEM (in thousands)

Consolidated Rate

(1) Total Normal Cost	\$ 130,629
(2) Total Salaries	890,091
(3) Normal Cost Rate for All Members, (1) / (2)	14.68%
(4) Average Member Contribution Rate	4.31%
(5) Consolidated Rate, (3) - (4)	10.37%

Past Service Rate

(1) Present Value of Accrued Benefits	\$1,556,610
(2) Valuation Assets	1,587,599
(3) Total Unfunded Liability, (1) - (2)	(30,989)
(4) 25-Year Amortization Factor	4.239720
(5) Past Service Payment, (3) / (4)	\$ (7,309)
(6) Total Salaries	890,091
(7) Past Service Rate, (5) / (6)	(.82%)

Total Employer Contribution Rate 9.55%

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT FUND
Comparative Statement of Operations

	FISCAL YEAR ENDED	
	June 30, 1987	June 30, 1986
Beginning Equities & Reserves	\$1,739,843,490	\$1,295,535,618
Additions:		
<u>Employees' Contributions</u>		
Akutan, City of	7,396	6,325
Alaska, State of	26,153,495	23,392,421
Alaska Housing Finance Corporation	77,115	66,113
Alaska Municipal League	7,274	4,597
Alaska State Housing Authority	233,082	171,845
Alaska Unorganized Borough Schools	(961)	(3,782)
Alaska, University of	3,491,986	2,748,532
Alaska, University of, Geophysical Inst.	176,076	131,977
Aleutian Region School District	24,473	14,157
Anchorage, Municipality of	5,256,890	4,020,282
Anchorage, Municipality of, Parking Auth.	20,148	(12,587)
Anchorage School District	2,304,781	1,573,487
Annette Island School District	28,019	22,604
Barrow, City of	81,628	14,658
Bartlett Memorial Hospital	1,409,213	-0-
Bering Straits School District	215,824	137,484
Bethel, City of	33,093	20,141
Bristol Bay Borough	61,098	35,926
Bristol Bay Borough School District	26,161	17,994
Bristol Bay Housing Authority	6,180	-0-
Chatham School District	19,680	14,594
Chugach Region School District	6,902	4,776
Copper River Region Housing Authority	1,295	-0-
Copper River School District	38,756	30,501
Cordova, City of	70,237	58,322
Cordova Community Hospital	46,108	35,323
Cordova Public Schools	24,552	19,204
Craig, City of	30,798	17,435
Craig School District	3,600	1,703
Dillingham, City of	53,933	69,462
Dillingham City School District	48,708	43,313
Emmonak, City of	16,847	-0-
Fairbanks, City of	758,556	641,664
Fairbanks Municipal Utility System	376,334	357,445
Fairbanks North Star Borough	539,482	434,724
Fairbanks North Star Borough School District	791,836	657,777
Fort Yukon, City of	1,386	6,023
Galena, City of	48,184	34,499
Galena City Schools	16,437	15,171

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT FUND
Comparative Statement of Operations

FISCAL YEAR ENDED
June 30, 1987 June 30, 1986

Additions - Continued:
Employees' Contributions

Haines Borough	6,647	4,923
Haines, City of	16,123	29,524
Homer, City of	191,305	-0-
Hoonah, City of	33,060	21,943
Hoonah City Schools	5,358	16,458
Hydaburg City School District	3,349	9,317
Iditarod Area School District	82,161	77,662
Juneau, City and Borough of	(118,974)	973,373
Juneau Borough School District	195,756	166,172
Kake, City of	(21,524)	9,392
Kashunamiut School District	17,078	16,101
Kenai, City of	189,515	116,905
Kenai Peninsula Borough	486,109	309,601
Kenai Peninsula Borough School District	390,670	297,666
Ketchikan, City of	285,182	246,364
Ketchikan Gateway Borough	118,903	71,736
Ketchikan Gateway Borough School District	99,321	47,756
King Cove, City of	22,970	22,173
King Cove City School District	12,444	8,861
Kodiak, City of	211,960	151,376
Kodiak Island Borough	124,601	76,634
Kodiak Island Borough School District	154,944	161,320
Kotzebue, City of	122,261	121,876
Kuspuk School District	54,537	45,970
Lake and Peninsula School District	45,798	36,131
Lower Kuskokwim School District	540,771	317,291
Lower Yukon School District	175,443	130,107
Matanuska-Susitna Borough	322,139	266,666
Matanuska-Susitna Borough School District	470,895	367,636
Nenana, City of	16,348	14,362
Nenana City Schools	14,550	11,805
Nome, City of	118,314	81,615
Nome City Schools	68,271	39,612
Nome Public Utilities	32,981	30,212
North Pacific Fisheries Management Council	28,457	24,816
North Pole, City of	55,095	25,405
North Slope Borough	1,990,216	1,358,465
North Slope Borough School District	427,116	280,450
Northwest Arctic Borough	33,917	-0-
Northwest Arctic School District	242,516	225,610

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT FUND
Comparative Statement of Operations

	FISCAL YEAR ENDED	
	June 30, 1987	June 30, 1986
Additions - Continued:		
<u>Employees' Contributions</u>		
Palmer, City of	103,780	119,865
Pelican, City of	6,741	5,062
Petersburg, City of	130,126	86,183
Petersburg General Hospital	41,767	29,854
Pribilof Region School District	12,602	3,091
Railbelt School District	27,397	26,924
Ruby, City of	7,023	712
Saint Paul, City of	49,134	46,135
Saint Mary's, City of	9,090	1,485
St. Mary's School District	22,696	-0-
Sand Point, City of	45,936	20,858
Sand Point City School District	5,430	7,753
Saxman, City of	1,349	716
Scammon Bay	-0-	231
Selawick, City of	709	-0-
Seward, City of	129,715	104,106
Seward General Hospital	54,894	19,164
Sitka, City and Borough of	210,054	164,680
Sitka Community Hospital	90,170	67,508
Sitka Borough School District	75,747	77,717
Skagway, City of	21,205	24,293
Soldotna, City of	5,318	90,175
Southeast Islands School District	36,764	18,690
Southeast Regional Resource Center	13,889	22,838
Southwest Region Schools	78,965	49,715
Special Education Service Agency	4,382	-0-
Tanana, City of	13,591	13,102
Tanana City School District	10,560	7,445
Terminated Employers	23,423	1,270
Thorne Bay, City of	9,720	4,876
Unalakleet, City of	15,935	11,674
Unalaska, City of	136,062	83,778
Unalaska City Schools	7,982	9,911
Valdez, City of	249,429	202,676
Valdez City Schools	97,611	55,198
Wainwright, City of	11,781	2,033
Wasilla, City of	22,959	25,984
Whittier, City of	40,694	25,813
Wrangell, City of	124,052	66,765
Wrangell City Schools	2,859	18,053
Yukon Flats School District	38,047	37,322
Yukon Koyukuk School District	64,852	55,276
Total Employees' Contributions	\$ 51,827,625	\$ 42,626,327

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT FUND
Comparative Statement of Operations

	FISCAL YEAR ENDED	
	June 30, 1987	June 30, 1986
Additions - Continued:		
<u>Employers' Contributions</u>		
Akutan, City of	10,664	14,994
Alaska, State of	64,361,897	71,213,438
Alaska Housing Finance Corporation	6,487	164,358
Alaska Municipal League	10,716	29,278
Alaska State Housing Authority	456,047	552,241
Alaska, University of	3,490,741	7,223,311
Alaska, University of, Geophysical Inst.	78,372	352,258
Aleutian Region School District	2,515	29,655
Anchorage, Municipality of	11,676,701	13,406,109
Anchorage, Municipality of Parking Auth.	8,900	47,215
Anchorage School District	5,227,693	6,014,300
Annette Island School District	41,287	51,088
Barrow, City of	16,564	65,313
Bartlett Memorial Hospital	343,503	-0-
Bering Straits School District	285,217	367,882
Bethel, City of	53,644	70,975
Bristol Bay Borough	92,738	116,134
Bristol Bay Borough School District	49,991	64,207
Bristol Bay Housing Authority	9,475	-0-
Chatham School District	24,157	41,825
Chugach Region School District	334	2,392
Copper River Region Housing Authority	2,628	-0-
Copper River School District	15,712	97,005
Cordova, City of	182,570	160,186
Cordova Community Hospital	(17,942)	88,733
Cordova Public Schools	66,574	65,405
Craig, City of	5,331	52,582
Craig School District	7,781	4,559
Dillingham, City of	42,507	112,180
Dillingham School District	72,675	167,815
Emmonak, City of	38,777	-0-
Fairbanks, City of	1,876,267	2,066,134
Fairbanks Municipal Utility System	1,092,135	1,283,387
Fairbanks North Star Borough	316,477	1,143,233
Fairbanks North Star Borough School District	468,071	1,558,941
Fort Yukon, City of	106	12,613
Galena, City of	69,192	106,137
Galena City Schools	6,680	33,709
Haines Borough	-0-	9,396
Haines, City of	(62)	66,288
Homer, City of	1,472,633	-0-

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT FUND
Comparative Statement of Operations

	<u>FISCAL YEAR ENDED</u>	
	<u>June 30, 1987</u>	<u>June 30, 1986</u>
Additions - Continued:		
<u>Employers' Contributions</u>		
Hoonah, City of	54,019	59,847
Hoonah City Schools	28,087	63,865
Hydaburg City School District	3,184	17,884
Iditarod Area School District	48,951	135,277
Juneau, City and Borough of	1,365,412	2,537,022
Juneau Borough School District	440,282	592,472
Kake, City of	2,788	36,866
Kashunamiut School District	30,968	29,138
Kenai, City of	229,030	344,986
Kenai Peninsula Borough	784,125	984,059
Kenai Peninsula Borough School District	849,415	1,135,633
Ketchikan, City of	1,410,612	1,023,728
Ketchikan Gateway Borough	227	181,184
Ketchikan Gateway Borough School District	200,168	120,459
King Cove, City of	773	47,327
King Cove City School District	19,531	25,205
Kodiak, City of	468,165	543,247
Kodiak Island Borough	78,480	192,632
Kodiak Island Borough School District	185,368	395,293
Kotzebue, City of	103,048	302,429
Kuspuk School District	34,196	95,250
Lake and Peninsula School District	1,835	94,123
Lower Kuskokwim School District	68,223	798,192
Lower Yukon School District	228,266	347,456
Matanuska-Susitna Borough	435,328	628,500
Matanuska-Susitna Borough School District	794,522	1,123,290
Nenana, City of	(250)	35,171
Nenana City Schools	31,991	36,854
Nome, City of	155,637	240,720
Nome City Schools	166,379	178,846
Nome Public Utilities	397	46,068
North Pacific Fisheries Management Council	1,278	47,099
North Pole, City of	55,452	101,085
North Slope Borough	(5,008)	2,632,858
North Slope Borough School District	218,003	635,658
Northwest Arctic Borough	24,689	-0-
Northwest Arctic School District	18,044	477,368
Palmer, City of	229,817	252,833
Pelican, City of	13,961	13,823
Petersburg, City of	417,659	353,697

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT FUND
Comparative Statement of Operations

FISCAL YEAR ENDED
June 30, 1987 June 30, 1986

Additions - Continued:
Employers' Contributions

Petersburg General Hospital	128,493	97,341
Pribilof Region School District	(1,404)	39,872
Railbelt School District	34,502	59,305
Ruby, City of	12,097	1,236
Saint Mary's, City of	23,551	2,912
Saint Mary's School District	92,202	-0-
Saint Paul, City of	4,340	81,360
Sand Point, City of	7,997	42,841
Sand Point City School District	4,214	19,745
Saxman, City of	2,976	12,822
Scammon Bay	(8,906)	545
Selawick, City of	1,220	-0-
Seward, City of	233,644	304,052
Seward General Hospital	151,819	86,899
Sitka, City and Borough of	647,688	620,607
Sitka Community Hospital	259	179,570
Sitka Borough School District	189,214	259,656
Skagway, City of	42,783	51,201
Soldotna, City of	227,630	299,780
Southeast Islands School District	8,621	40,557
Southeast Regional Resource Center	(215)	56,127
Southwest Region Schools	(43)	131,915
Special Education Service Agency	7,504	-0-
Tanana, City of	3,642	36,923
Tanana City School District	6,544	20,899
Terminated Employers	-0-	(1,270)
Thorne Bay, City of	14,008	13,722
Unalakleet, City of	4,559	53,446
Unalaska, City of	(1,426)	209,305
Unalaska City Schools	13,888	28,356
Valdez, City of	191,283	446,299
Valdez City Schools	83,711	195,317
Wainwright, City of	13,964	2,852
Wasilla, City of	16,993	60,474
Whittier, City of	42,541	70,036
Wrangell, City of	164,182	171,141
Wrangell City Schools	45,102	42,308

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT FUND
Comparative Statement of Operations

	FISCAL YEAR ENDED	
	June 30, 1987	June 30, 1986
Additions - Continued:		
<u>Employers' Contributions</u>		
Yukon Flats School District	316	94,326
Yukon Koyukuk School District	-0-	131,501
Total Employers' Contributions	\$ 103,568,300	\$ 127,726,698
Investment Income	230,013,445	\$ 182,140,000
Market Value Adjustment	(27,799,173)	\$ 159,873,421
DVA, Long Term Care, RIP Admin	201,592	-0-
Total Additions	\$ 357,811,789	\$ 512,366,446
Equities, Reserves and Additions	<u>\$2,097,655,279</u>	<u>\$1,807,902,064</u>
Deductions:		
Administrative Expenses		
Personal Services	969,192	1,045,871
Travel and Moving	36,861	39,775
Contractual Services	446,940	482,296
Supplies and Materials	11,758	12,683
Machinery/Equipment	14,694	15,852
Grants/Interagency Services	3,505,528	1,970,500
Total Administrative Services	4,984,973	3,566,977
Employees' Contributions and Interest		
Refunded	10,524,697	9,165,313
Provision for Loan Losses	4,221,000	-0-
Medical Benefit Expenses	10,255,570	9,410,481
Retirement Benefits Paid	57,473,263	45,915,803
Total Deductions	\$ 87,459,503	\$ 68,058,574
Ending Equities and Reserves - Adjusted	<u>\$2,010,195,776</u>	<u>\$1,739,843,490</u>

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT SYSTEM
Benefit Payments Breakdown
Fiscal Year 1987

Benefit Type	Totals All Categories	Regular Retirees	Peace Officer Retirees	Fireman Retirees	*Elected Off. Retirees
Base Benefits	\$42,851,139	\$38,206,429	\$3,901,771	\$662,679	\$80,260
Cost of Living Allowance	3,706,433	3,294,962	340,158	59,304	12,009
Non-Occupational Death	1,274,824	1,202,658	36,879	33,805	1,482
Occupational Death	292,203	109,120	163,355	19,728	-0-
Disability Benefits	1,354,451	918,318	281,632	154,501	-0-
Post Retirement Pension Adjustment	7,622,498	6,841,062	608,534	158,667	14,235
Voluntary Annuity	6,661	6,661	-0-	-0-	-0-
Lump Sum Benefit	365,054	365,054	-0-	-0-	-0-
Medical Benefits	10,255,570	9,647,619	463,201	106,753	37,997
Totals by Membership Category		<u>\$60,591,883</u>	<u>\$5,795,530</u>	<u>\$1,195,437</u>	<u>\$145,983</u>
Totals all Benefits	<u>\$67,728,833</u>				

Retirees (6/30/87)

5,668

5,332

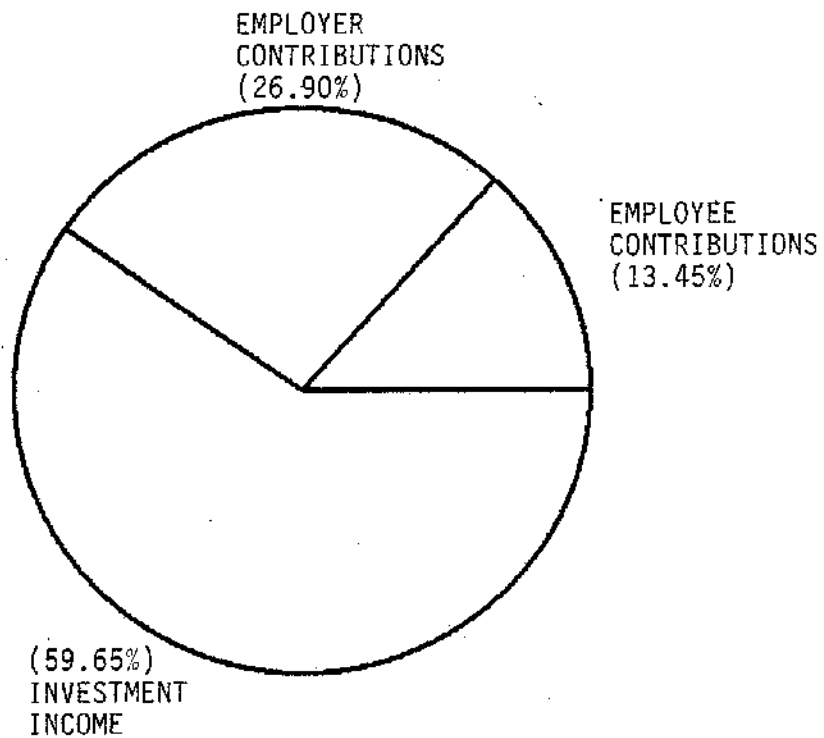
256

59

21

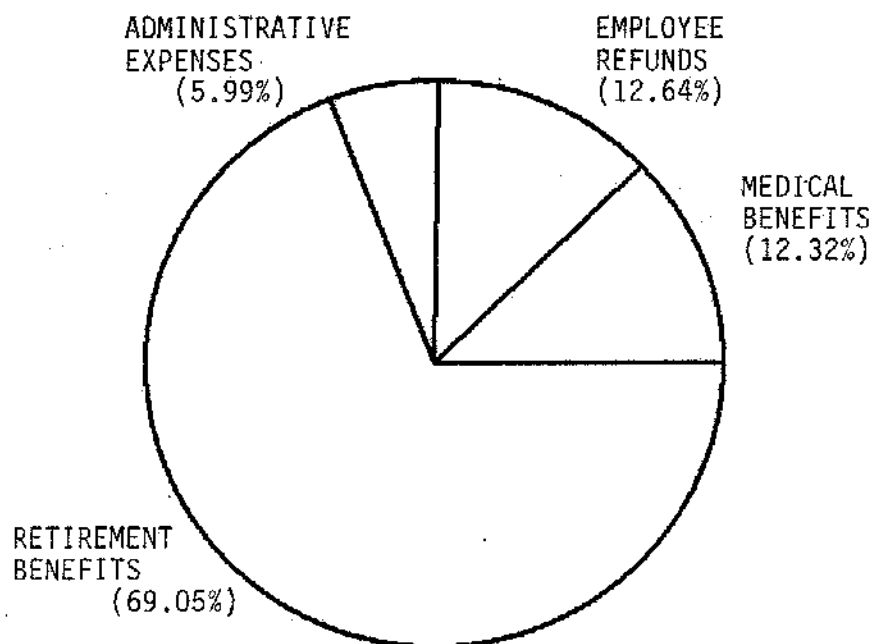
* Active and Retired Elected Public Officers as of October 13, 1976, were mandatorily transferred to the Elected Public Officers Retirement System (EPORS), which was established by Legislation on January 1, 1976. Under current Legislation, all other elected officials may participate in the PERS or the TRS, or do not participate at their option.

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT SYSTEM
YEAR ENDED JUNE 30, 1987
INCOME AND RECEIPTS
\$385,610,962



STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT SYSTEM
YEAR ENDED JUNE 30, 1987

DISBURSEMENTS
\$83,238,503

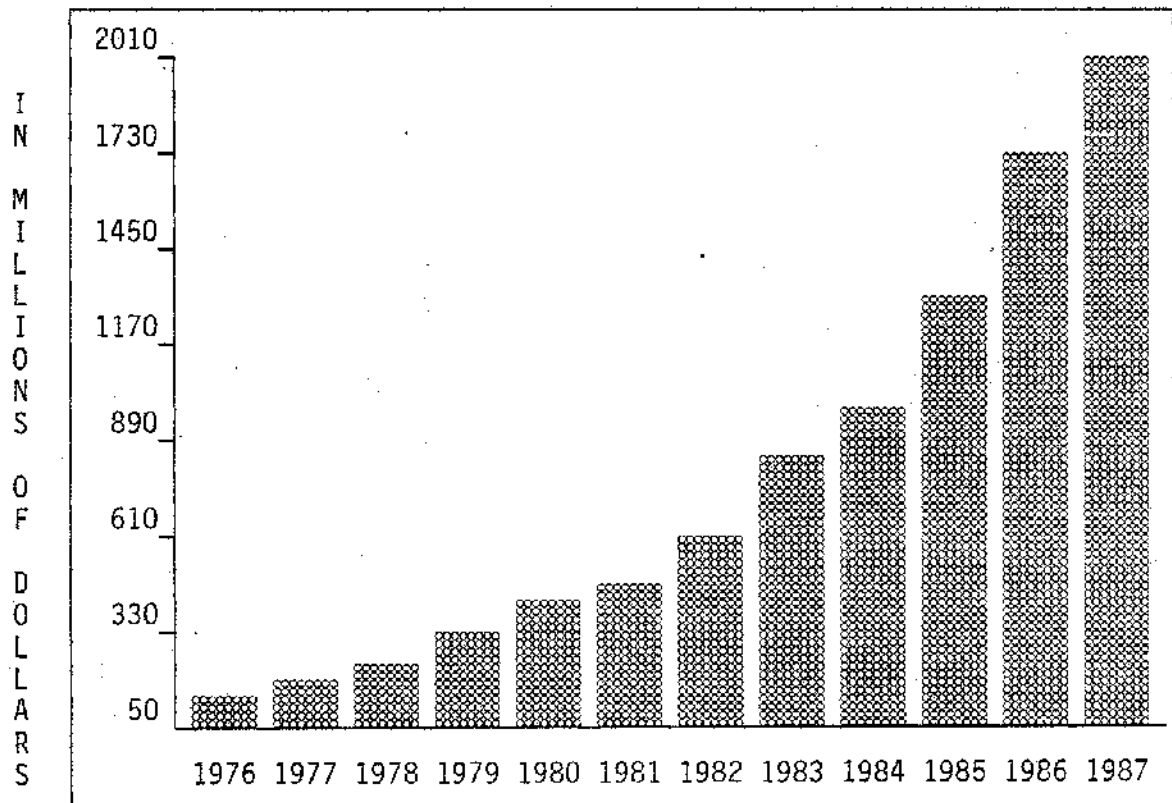


STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT FUND
Historical Data
Fiscal Years 1976 through 1987
(cents omitted)

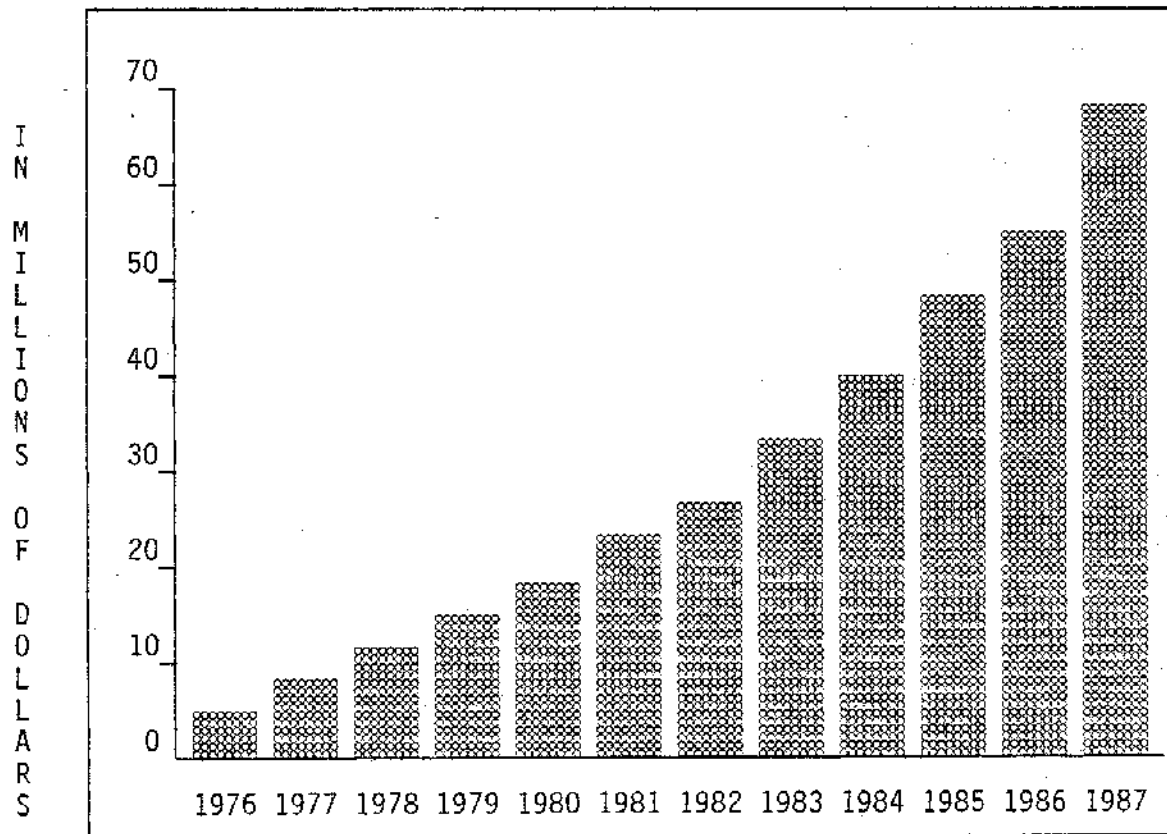
Fiscal Year	Assets Fiscal Year End	Employers' Contributions During Fiscal Year	Employees' Contributions During Fiscal Year	Benefits Paid Including Medical Expenses & Death Benefits	Employees' Contributions and Interest Refunded During Fiscal Year	Net Investment Income During Fiscal Year
1976	141,988,644	22,712,558	12,348,074	4,842,542	3,758,719	8,367,857
1977	190,954,572	34,881,182	13,438,538	7,607,162	3,816,748	12,602,465
1978	246,662,043	38,735,575	16,176,433	11,005,738	4,345,592	16,612,594
* 1979	316,675,507	47,613,575	17,631,003	14,947,478	4,978,848	25,177,371
1980	402,125,897	56,236,318	20,898,263	17,775,811	5,759,464	37,489,889
1981	493,075,440	71,832,706	24,321,437	22,803,960	7,006,149	50,366,085
1982	609,103,807	88,332,287	28,918,210	27,438,183	7,192,268	51,408,749
1983	837,559,610	99,726,866	32,594,208	32,942,505	7,682,104	85,609,413
1984	964,702,019	114,245,148	36,764,836	39,998,747	8,888,000	100,972,192
1985	1,295,535,618	123,465,277	39,577,155	48,836,818	9,553,211	112,261,296
1986	1,739,843,490	127,726,698	42,626,327	55,326,284	9,165,313	182,140,000
1987	2,010,195,776	103,718,277	51,879,240	67,728,833	10,524,697	197,993,272

* Figures presented on an accrual basis effective FY 1979.

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT FUND
TOTAL ASSETS
FISCAL YEARS 1976 THROUGH 1987



STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT SYSTEM
BENEFITS PAID
FISCAL YEARS 1976 THROUGH 1987



STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT FUND
Employer Contribution Rates
Fiscal Year 1987

<u>Employer</u>	<u>Percentage</u>
Akutan	9.81
Alaska, State of	
Policemen, Firemen	15.74
Inland Boatmen	14.44
All Other Employees	11.30
Alaska Housing Finance Corporation	0.42
Alaska Municipal League	7.43
Alaska State Housing Authority	11.62
Alaska, University of	3.09
Alaska, University of, Geophysical Institute	3.09
Aleutian Region School District	0.00
Anchorage, Municipality of	12.00
Anchorage, Municipality of Parking Authority	3.13
Anchorage School District	14.15
Annette Island School District	8.74
Barrow, City of	2.91
Bartlett Memorial Hospital	8.06
Bering Straits School District	7.98
Bethel, City of	11.15
Bristol Bay Borough	10.88
Bristol Bay Borough School District	13.45
Bristol Bay Housing Authority	11.10
Chatham School District	6.71
Chugach Regional School District	0.00
Copper River Basin Regional Housing Authority	13.57
Copper River School District	3.67
Cordova, City of	13.48
Cordova Community Hospital	0.00
Cordova Public Schools	15.23
Craig, City of	0.97
Craig School District	11.86
Dillingham, City of	5.52
Dillingham City School District	9.07
Emmonak, City of	11.68
Fairbanks, City of	15.44
Fairbanks Municipal Utility System	15.44
Fairbanks North Star Borough	3.45
Fairbanks North Star Borough School District	3.45
Fort Yukon, City of	0.00
Galena, City of	8.32
Galena City Schools	2.25
Haines Borough	0.00
Haines, City of	0.00
Homer, City of	9.97
Hoonah, City of	9.11
Hoonah City Schools	17.86
Hydaburg City School District	3.94
Iditarod Area Schools	3.96

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT FUND
Employer Contribution Rates
Fiscal Year 1987

Continued

<u>Employer</u>	<u>Percentage</u>
Juneau Borough Schools	13.15
Juneau, City and Borough of	8.06
Kake, City of (Terminated from PERS 9/20/86)	15.14
Kashunamiut School District	9.97
Kenai, City of	7.18
Kenai Peninsula Borough	10.82
Kenai Peninsula Borough School District	13.02
Ketchikan, City of	18.64
Ketchikan Gateway Borough	0.00
Ketchikan Gateway Borough School District	11.77
King Cove, City of	0.00
King Cove City School District	10.18
Kodiak, City of	13.45
Kodiak Island Borough	4.27
Kodiak Island Borough School District	7.29
Kotzebue, City of	4.51
Kuspuk School District	2.47
Lake & Peninsula School District	0.00
Lower Kuskokwim School District	0.14
Lower Yukon School District	7.45
Matanuska-Susitna Borough	9.32
Matanuska-Susitna Borough School District	9.32
Nenana, City of	0.00
Nenana City Public Schools	12.85
Nome, City of	10.96
Nome City Schools	13.44
Nome Joint Utilities	0.00
North Pacific Fisheries Mgt. Council	0.00
North Pole, City of	5.94
North Slope Borough	0.00
North Slope Borough School District	3.08
Northwest Arctic Borough	9.97
Northwest Arctic School District	0.00
Palmer, City of	12.81
Pelican, City of	12.03
Petersburg, City of	16.87
Petersburg General Hospital	16.87
Pribilof Region School District	0.00
Railbelt School District	6.97
Ruby, City of	9.97
Saint Mary's, City of	14.95
Saint Mary's School District	22.38
Saint Paul, City of	0.00
Sand Point, City of	0.00
Sand Point City School District	3.95

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT FUND
Employer Contribution Rates
Fiscal Year 1987

Continued

<u>Employer</u>	<u>Percentage</u>
Saxman, City of	8.38
Selawik, City Council	9.97
Seward, City of	10.66
Seward General Hospital	16.50
Sitka, City and Borough of	18.86
Sitka Community Hospital	0.00
Sitka Borough School District	12.19
Skagway, City of	6.45
Soldotna, City of	14.34
Southeast Islands School District	1.84
Southeast Regional Resource Center	0.00
Southwest Region Schools	0.00
Special Education Service Agency	9.97
Tanana, City of	1.10
Tanana City School District	3.20
Thorne Bay, City of	8.12
Unalakleet, City of	0.55
Unalaska, City of	0.00
Unalaska City Schools	9.57
Valdez, City of	4.95
Valdez City Schools	5.84
Wainright, City of	9.97
Wasilla, City of	3.49
Whittier, City of	7.82
Wrangell, City of	10.51
Wrangell City Schools	15.23
Yukon Flats School District	0.04
Yukon Koyukuk School District	0.00

TEACHERS' RETIREMENT SYSTEM

STATE OF ALASKA

TEACHERS' RETIREMENT SYSTEM

BOARD MEMBERS

<u>NAME</u>	<u>TERM EXPIRES</u>
DOROTHY WELLS, CHAIRPERSON	JUNE 30, 1990
MERRITT C. OLSON, VICE-CHAIRMAN	JANUARY 31, 1989
CHARLES M. ARTEAGA	JANUARY 31, 1990
GARRIS (BOB) COVINGTON	JANUARY 31, 1988
STEPHANIE WINSOR	JUNE 30, 1990

KPMG Peat Marwick

Certified Public Accountants

Peat Marwick Main & Co.

601 West Fifth Avenue, Suite 700

Anchorage, AK 99501

Division of Retirement and Benefits and
Members of the Alaska Teachers' Retirement Board
State of Alaska Teachers' Retirement System:

We have examined the statements of net assets available for benefits of the State of Alaska Teachers' Retirement System as of June 30, 1987 and 1986, and the related statements of changes in net assets available for benefits for the years then ended and the statement of accumulated plan benefits as of June 30, 1986. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the financial statements referred to above present fairly the financial status of the Plan as of June 30, 1986, and the changes in its financial status for the year then ended, and information regarding net assets available for benefits and changes therein as of and for the years ended June 30, 1987 and 1986, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Peat Marwick Main & Co.

September 15, 1987

STATE OF ALASKA
TEACHERS' RETIREMENT SYSTEM

Statements of Net Assets Available for Benefits

June 30, 1987 and 1986

(in thousands)

	<u>1987</u>	<u>1986</u>
Assets:		
Investments, at fair value:		
Short-term investments	\$ 2,800	20,000
United States Government securities	445,972	370,699
Corporate bonds, notes and debentures	116,438	130,623
Common stocks	392,601	281,712
Foreign stocks	134,420	71,491
Real estate equity funds	75,598	64,860
Financial futures	-	1
Total investments	<u>1,167,829</u>	<u>939,386</u>
Loans and mortgages, at cost, net of allowance for loan losses of \$3,694 in 1987	<u>112,421</u>	<u>169,653</u>
Receivables:		
Contributions	7,935	8,470
Accrued interest and dividends	13,188	13,127
Total receivables	<u>21,123</u>	<u>21,597</u>
Cash in interest-bearing accounts	4,017	11,907
Total assets	<u>1,305,390</u>	<u>1,142,543</u>
Liability - accrued expenses	<u>1,926</u>	<u>893</u>
Net assets available for benefits	<u>\$ 1,303,464</u>	<u>1,141,650</u>

See accompanying notes to financial statements.

STATE OF ALASKA
TEACHERS' RETIREMENT SYSTEM

Statements of Changes in Net Assets Available for Benefits

Years ended June 30, 1987 and 1986

(in thousands)

	<u>1987</u>	<u>1986</u>
Additions:		
Investment income:		
Net appreciation (depreciation) in fair value of investments (note 5)	\$ (15,677)	103,643
Interest	69,076	75,722
Dividends	8,734	7,054
Net realized gains	69,576	36,397
Total investment income before provision for losses on loans and mortgages	131,709	222,816
Provision for losses on loans and mortgages	3,694	-
Net investment income	<u>128,015</u>	<u>222,816</u>
Contributions:		
State of Alaska and other employers	58,177	69,276
Employees	34,159	32,039
Total contributions	<u>92,336</u>	<u>101,315</u>
Total additions	<u>220,351</u>	<u>324,131</u>
Deductions:		
Benefits paid:		
Retirement	46,183	38,476
Medical	4,613	4,424
Total benefits paid	<u>50,796</u>	<u>42,900</u>
Refunds to terminated employees	4,239	3,311
Administrative expenses	3,502	2,603
Total deductions	<u>58,537</u>	<u>48,814</u>
Net increase	161,814	275,317
Net assets available for benefits:		
Beginning of year	<u>1,141,650</u>	<u>866,333</u>
End of year	\$ <u>1,303,464</u>	<u>1,141,650</u>

See accompanying notes to financial statements.

STATE OF ALASKA
TEACHERS' RETIREMENT SYSTEM

Statement of Accumulated Plan Benefits

June 30, 1986

(in thousands)

Actuarial present value of accumulated benefits:

Vested benefits:

Participants currently receiving payments	\$ 363,263
Other participants	<u>608,934</u>
Total vested benefits	972,197

Nonvested benefits

97,004

Total actuarial present value of accumulated benefits	\$ <u>1,069,201</u>
---	---------------------

At June 30, 1985, the total actuarial present value of accumulated benefits was \$951,913. During the year ended June 30, 1986, the actuarial present value of accumulated plan benefits increased \$26,982 as a result of changes in the actuarial assumptions (notes 3 and 6).

See accompanying notes to financial statements.

STATE OF ALASKA
TEACHERS' RETIREMENT SYSTEM

Notes to Financial Statements

June 30, 1987 and 1986

(1) Description of State of Alaska Teachers' Retirement System (Plan)

The following brief description of the Plan is provided for general information purposes only. Participants should refer to the Plan agreement for more complete information.

The Plan is a joint-contributor plan created by State of Alaska Statutes effective July 1, 1955. The Plan was established to provide benefits for teachers and other eligible participants.

Pension Benefits

General employees with eight or more years of credited service are entitled to annual pension benefits beginning at normal retirement age (55) equal to 2% of their highest three-year average monthly compensation for each year of service. The Plan permits early retirement at age 50. Employees may elect to receive their pension benefits in the form of a joint and survivor annuity. Effective January 1, 1987, a married member who retires must receive his benefit in the form of a joint and survivor annuity unless the member's spouse consents to another form of benefit. Minimum benefits for employees eligible for retirement are \$25 per month for each year of credited service. In addition, major medical benefits are provided.

Death and Disability Benefits

If an active employee, first hired under the Plan before July 1, 1982, is participating in the supplemental contribution provision, dies and is survived by a dependent child or children, the employee's spouse and children receive a survivor's allowance from the Plan. The amount of the survivor's allowance is determined by the participant's base salary and the number of dependent children. If an active employee was first hired under the Plan on or after July 1, 1982, is not participating in or eligible for coverage under the supplemental contribution provision and dies from an occupational cause, the spouse or beneficiary will receive a monthly pension from the Plan. The amount of the pension changes on the date the employee's normal retirement would have occurred if the employee had lived. The new benefit is based on the employee's average base salary at the time of his/her death and the credited service that would have accrued if the employee had lived and continued to work until normal retirement age.

If an employee with five or more paid-up years of membership service is not eligible for normal retirement benefits and becomes permanently disabled, the employee is entitled to a monthly benefit. The annual disability benefit is equal to 50% of the base salary at time of disablement plus an additional 10% of his/her base salary for each dependent child up to a maximum of four children.

(Continued)

STATE OF ALASKA
TEACHERS' RETIREMENT SYSTEM

Notes to Financial Statements

Retirement Incentive Program

Legislation passed in May 1986 established a retirement incentive program designed to encourage eligible employees to voluntarily retire in order to reduce personnel service costs. The program was available to eligible employees until June 30, 1987, except for eligible University of Alaska employees where the program is available from October 1, 1986 to September 30, 1987.

The Plan is to be reimbursed by the participating agency or employer of the program within three years after the end of the fiscal year in which a member retires. The amount of reimbursement is the actuarial equivalent of the difference between the benefits the member receives after the addition of the retirement incentive under the program and the amount the member would have received without the incentive, less any amount the participant has paid as part of retiring under the program. Participating members are indebted 21% of their annual compensation for the school year in which the member terminates employment to participate in the program. An outstanding indebtedness at the time a participant is appointed to retirement will result in an actuarial adjustment to his/her benefit.

The effect of the retirement incentive program on the actuarial present value of accumulated benefits or the related contributions due from employers and employees electing to fund their early retirement has not been determined.

(2) Summary of Significant Accounting Policies

Valuation of Investments

Investments, other than real estate equity fund and loans and mortgages, are carried at market value to reflect the asset values of the Plan as determined by the last quoted sales price at June 30, 1987 and 1986.

Real estate equity funds are stated at estimated market value as determined by the independent management of the investment accounts. These investments do not have a readily available market and generally represent long-term investments.

Loans and mortgages are serviced by the institution from which the loan is purchased. The policy of the Plan is to hold these investments until maturity and, accordingly, the investments are stated at cost, less an allowance for estimated loan losses. Loans and mortgages include approximately \$5,915,000 and \$2,078,000 for 1987 and 1986, respectively, of other real estate owned. Other real estate owned represents properties on which the Plan has foreclosed and is holding with the intent to resell.

(Continued)

STATE OF ALASKA
TEACHERS' RETIREMENT SYSTEM

Notes to Financial Statements

The Commissioner of Revenue has the statutory authority to invest the moneys of the Plan. This authority is delegated to investment officers of the Treasury Division of the Department of Revenue. Alaska Statute provides for the investment in United States Treasury or agency securities; corporate debt securities; preferred and common stock, commercial paper; securities of foreign governments, agencies and corporations; foreign time deposits, gold bullion; futures contracts for the purpose of hedging; real estate investment trusts; deposits within Alaska savings and loans and mutual savings banks; deposits with state and national banks in Alaska, guaranteed loans; notes secured by mortgages; certificates of deposit and banker's acceptances.

The Plan's deposits and investments are categorized below pursuant to the Governmental Accounting Standards Board (GASB) Statement No. 3 and GASB Technical Bulletin No. 87-1 to give an indication of the level of safekeeping risk assumed by the Plan at June 30, 1987.

Deposits:

- Category 1. Insured or collateralized with securities held by the state or its custodian in the state's name.
- Category 2. Collateralized with securities held by the pledging financial institution's trust department or custodian in the state's name.
- Category 3. Uncollateralized.

Investments:

- Category 1. Insured or registered for which the securities are held by the state or its custodian in the state's name.
- Category 2. Uninsured and unregistered investments for which the securities are held by the broker's or dealer's trust department or agent in the state's name.
- Category 3. Uninsured and unregistered investments for which the securities are held by the broker's or dealer's trust department or agent but not in the state's name.

(Continued)

STATE OF ALASKA
TEACHERS' RETIREMENT SYSTEM

Notes to Financial Statements

	Category (in thousands)			Carrying value	Market value of securities
	<u>1</u>	<u>2</u>	<u>3</u>		
Deposits - cash	\$ 4,017	-	-	4,017	4,098
Investments:					
Repurchase agreements	2,800	-	-	2,800	2,857
U.S. Government securities	445,972	-	-	445,972	445,972
Corporate bonds	116,438	-	-	116,438	116,438
Common stocks	392,601	-	-	392,601	392,601
Foreign stocks	-	134,420	-	134,420	134,420
Real estate equity funds	75,598	-	-	75,598	75,598
	<u>\$ 1,037,426</u>	<u>134,420</u>	<u>-</u>	<u>1,171,846</u>	<u>1,171,984</u>

Treasury investment policy requires that securities underlying the repurchase agreements must have a minimum market value of 102% of the cost of the repurchase agreement. There were no violations of this policy during the dates covered by this statement.

Contributions Receivable

Contributions from employees and employers for service through June 30 are accrued. These contributions are considered fully collectible and, accordingly, no allowance for uncollectible receivables is considered necessary.

Investment Income Receivable

Investment income receivable represents amounts earned but not yet received as of June 30. These amounts are considered fully collectible and, accordingly, no allowance for uncollectible receivables is considered necessary.

(3) Actuarial Present Value of Accumulated Benefits

Accumulated benefits are those future periodic payments, including lump-sum distributions, that are attributable under the Plan's provision to the service employees have rendered. Accumulated benefits include benefits expected to be paid to retired or terminated employees or their beneficiaries, beneficiaries of employees who have died, and present employees or their beneficiaries. Benefits under the Plan are based on employees' compensation during their highest three years of credited service. The accumulated benefits for active employees are based on their average compensation during the three years ending on the date that the benefit information is presented (the valuation date). Benefits payable under all circumstances--retirement, death, disability, and termination of employment--are included, to the extent they are deemed attributable to employee service rendered to the valuation date.

(Continued)

STATE OF ALASKA
TEACHERS' RETIREMENT SYSTEM

Notes to Financial Statements

The actuarial present value of accumulated benefits is determined by an actuary from William M. Mercer-Meidinger Incorporated and is that amount that results from applying actuarial assumptions to adjust the accumulated benefits to reflect the time value of money (through discounts for interest) and the probability of payment (by means of decrements such as for death, disability, withdrawal, or retirement) between the valuation date and the expected date of payment. The significant actuarial assumptions used in the valuations as of June 30, 1986 are as follows:

- a. Actuarial cost method - projected unit credit, unfunded accrued benefit liability amortized over 25 years, funding surplus amortized over 5 years.
- b. Mortality basis - 1984 Unisex Pension Mortality Table set back one and one-half years.
- c. Retirement age - retirement rates based on actual experience.
- d. Interest rate - 9% per annum, compounded annually, net of investment expenses.
- e. Health cost inflation - 9% per annum.
- f. Salary scale - increase of 6.5% for the first five years of employment and 5.5% per year thereafter.
- g. Cost of living allowance (domicile in Alaska) - 54% of those receiving benefits will be eligible to receive the cost of living allowance.
- h. Contribution refunds - 100% of those terminating after age thirty-five with eight or more years of service will leave their contributions and thereby retain their deferred vested benefit. All others who terminate are assumed to have their contributions refunded.
- i. Asset valuation - three-year average ratio between market and book values of the Plan's assets.

Turnover and disability assumptions are based upon actual historical occurrence rates of the Plan. The foregoing actuarial assumptions are based on the presumption that the Plan will continue. Were the Plan to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated benefits.

(Continued)

STATE OF ALASKA
TEACHERS' RETIREMENT SYSTEM

Notes to Financial Statements

(4) Funding Policy

Employees' Contributions

Employees contribute 7% of their base salary as required by statute. A qualified member may make an additional contribution of 1% of his/her base salary. Contributions are collected by employers and remitted to the Plan. Present employees' accumulated contributions at June 30, 1987 were \$271,282,000.

Employer Contribution

The employers' contribution rate is determined annually on an actuarial basis.

(5) Investments

During 1987 and 1986, the Plan's investments (including investments bought, sold, as well as held during the year) appreciated (depreciated) in value as follows:

	<u>1987</u>	<u>1986</u>
United States Government securities	\$ (21,893)	48,917
Corporate bonds, notes and debentures	(5,576)	5,367
Common stock	3,984	35,049
Foreign stock	7,211	14,870
Foreign bonds	-	(935)
Real estate equity funds	<u>597</u>	<u>375</u>
	<u>\$ (15,677)</u>	<u>103,643</u>

(6) Change in Actuarial Assumptions

Effective July 1, 1986, the Plan adopted new actuarial assumptions. The actuarial method used is the same, however, actuarial funding surpluses are amortized over five years rather than twenty-five years. The assumed rate of interest was increased from 8% to 9% per year. The salary scale assumption was lowered to 6.5% per year for the first five years' of employment and 5.5% per year thereafter, down from 8% and 7%, respectively. Health care cost inflation was increased to 9% rather than 8%. Turnover and disability assumptions were revised based on actual experience in 1981 through 1985. The method for determining accumulated Plan benefits was changed to include not only a valuation of retirement benefits but also of deferred vested, death benefits and other ancillary benefits.

(Continued)

STATE OF ALASKA
TEACHERS' RETIREMENT SYSTEM

Notes to Financial Statements

(7) Contingent Liabilities

The State of Alaska Public Employees' Retirement System (PERS) was a party to an action contesting application of the early retirement factors adopted by PERS in the calculation of the actuarial present value of the accumulated Plan benefits. The Alaska Supreme Court ruled in 1987 that the PERS application of the early retirement factors was incorrect. While the suit was not directed at the State of Alaska Teachers' Retirement System (TRS), its outcome indirectly affected the TRS application of actuarial retirement factors. The effect of the suit on the actuarial present value of accumulated benefits or the amount payable to retirees as a result of not using more favorable actuarial retirement factors has not been determined and, in the opinion of the TRS actuary and officials of the Department of Retirement and Benefits, will not significantly affect the Plan's financial status.

HIGHLIGHTS

This report has been prepared by William M. Mercer-Meidinger, Incorporated to:

- (1) present the results of a valuation of the Alaska Teachers' Retirement System as of June 30, 1986;
- (2) review experience under the plan for the year ended June 30, 1986;
- (3) determine the contribution rates for the State and for each school district in the system;
- (4) provide reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

The report is divided into two sections. Section 1 describes the basis of the valuation. It summarizes the plan provisions, provides information relating to the plan participants, and describes the funding methods and actuarial assumptions used in determining liabilities and costs.

Section 2 contains the results of the valuation. It includes the experience of the plan during the 1985-86 plan year, the current annual costs, and reporting and disclosure information.

The principle results are as follows:

Funding Status as of June 30:	<u>1985**</u>	<u>1986</u>
(a) Valuation Assets*	\$ 833,617	\$1,040,173
(b) Present Value of Accrued Benefits*	1,021,533	1,115,773
(c) Accrued Benefit Funding Ratio, (a)/(b)	81.6%	93.2%
Contributions for Fiscal Year	<u>1987 & 1988</u>	<u>1989</u>
(a) Normal Cost	9.02%	9.36%
(b) Past Service Rate	4.26%	1.80%
(c) Total Contribution Rate	13.28%	11.16%

* In thousands.

** After change in assumptions.

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions, in conjunction with employee data provided to us by the plan sponsor and financial information provided by the audited report from Peat, Marwick, Mitchell and Company, to determine a sound value for the plan liabilities. We believe that this value and the method suggested for funding it are in full compliance with the Governmental Accounting Standards Board, the Internal Revenue Code, and all applicable regulations.

Respectfully submitted,

Robert F. Richardson

Robert F. Richardson, ASA
Principal

RFR/GTS/js/jam

Gregory T. Smith

Gregory T. Smith
Senior Actuarial Assistant

March 27, 1987

ANALYSIS OF THE VALUATION

Investment Performance

During the 1986 fiscal year, the investment return rate, based upon market values, was even greater than last year's recordsetting performance. During the most recent plan year, the market value investment return rate was 24.6%. Using the three-year smoothing approach, valuation assets returned 17.6% during the year . . . thus leading to a very large actuarial gain from investment sources. This actuarial gain was primarily responsible for the large drop in the past service rate and the large increase in the accrued benefit funding ratio.

Health Inflation

For the second year in a row, there has been a decrease in the monthly premium to provide retiree health coverage under the TRS. For FY87, the premium is \$165 per month, down from \$168.25 from a year ago. Thus, there was a significant actuarial gain from the health inflation assumption for the first time in FY86.

Membership Statistics

As we have discussed for the last few years, there has been a steady trend upward in the average age of TRS members. For the 8.5-year period from January 1, 1977 to June 30, 1986, the average annual increase has been .34 years. In the most recent year, the increase was much larger than even this average, with an increase of .44 years. This increase in average age tends to increase costs, especially the normal cost. For the first time in several years, average credited service had a measurable increase, going from 9.54 years to 9.81 years. Salary increases last year were somewhat more, on average, than in prior years, with an increase of 7.76%.

Retiree Statistics

The number of new retirees during FY86 dropped down to 189, much fewer than the year before, but more in keeping with the statistics in prior years. Perhaps of greatest significance was the 1.11 increase in average age at retirement for the service retirements. A year ago, the average age at retirement for a service retirement was 54.95, while this year it increased to 56.06.

Conclusions

For the second straight year, investment performance has been instrumental in increasing the funding ratio and decreasing costs for the TRS. Also, there were significant actuarial gains generated from the less-than-anticipated retiree health insurance premium. The retirement incentive program (RIP) will probably result in significant changes in the demographic makeup of the average TRS member. In

general, a decrease in average age will lead to a decrease in the normal cost rate. As before, the most important factor will be the investment performance of the fund. With another excellent year like we have experienced during the last two, the Teachers' Retirement System might achieve full funding.

Section 1.3
ACTUARIAL BASIS

Valuation of Liabilities

- A. Actuarial Method - Projected Unit Credit. Liabilities and contributions shown in the report are computed using the Projected Unit Credit method of funding. The unfunded accrued benefit liability is amortized over 25 years. Actuarial funding surpluses are amortized over five years.

The objective under this method is to fund each participant's benefits under the plan as they accrue. Thus, each participant's total pension projected to retirement with salary scale is broken down into units, each associated with a year of past or future service. The principle underlying the method is that each unit is funded in the year for which it is credited. Typically, when the method is introduced there will be an initial liability for benefits credited for service prior to that date, and to the extent that this liability is not covered by Assets of the Plan there is an Unfunded Liability to be funded over a chosen period in accordance with an amortization schedule.

An Accrued Liability is calculated at the valuation date as the present value of benefits credited with respect to service to that date.

The Unfunded Liability at the valuation date is the excess of the Accrued Liability over the Assets of the Plan. The level annual payment to be made over a stipulated number of years to amortize the Unfunded Liability is the Past Service Cost.

The Normal Cost is the present value of those benefits which are expected to be credited with respect to service during the year beginning on the valuation date.

Under this method, differences between the actual experience and that assumed in the determination of costs and liabilities will emerge as adjustments in the Unfunded Liability, subject to amortization.

- B. Method For Accumulated Plan Benefit Values - The actuarial present value of accumulated plan benefits (the term used for Financial Accounting Standards Board purposes) and present value of vested accumulated benefits are a measure of plan benefits which have been earned to date. These are not only a valuation of retirement benefits, but also of deferred vested, death benefits, and other ancillary benefits. Earnings and service for benefit purposes which are expected to be earned after the valuation date are excluded from these values.

The actuarial assumptions used to determine these values are identical to those used for the funding purposes.

In estimating accumulated benefits, final average compensation is based on compensation data in the possession of the actuary.

C. Actuarial Assumptions -

- | | |
|-------------------------|---|
| 1. Interest | 9% per year, compounded annually, net of expenses. |
| 2. Salary Scale | 6.5% per year for the first five years of employment and 5.5% per year thereafter. |
| 3. Health Inflation | 9% per year. |
| 4. Mortality | 1984 Unisex Pension Mortality Table set back 1-1/2 years. |
| 5. Turnover | Based upon the 1981-85 actual total turnover experience. (See Table 1). |
| 6. Disability | Incidence rates in accordance with Table 2. Post-disability mortality in accordance with rates published by the Pension Benefit Guaranty Corporation to reflect mortality of those receiving disability benefits under Social Security. |
| 7. Retirement Age | Retirement rates based on actual experience in accordance with Table 3. |
| 8. Spouse's Age | Wives are assumed to be four years younger than husbands. |
| 9. Contribution Refunds | 100% of those terminating after age 35 with eight or more years of service will leave their contributions and thereby retain their deferred vested benefit. All others who terminate are assumed to have their contributions refunded. |
| 10. C.O.L.A. | 54% of those receiving retirement benefits will be eligible for C.O.L.A. |

11. Sick Leave

4.7 days of unused sick leave for each year of service will be available to be credited once the member is retired.

12. Expenses

Expenses are covered in the interest assumption.

Valuation of Assets

Based upon the three-year average ratio between market and book values of the System's assets, except that bonds are carried at book value. Assets are accounted for on an accrued basis.

Valuation of Medical Benefits

Medical benefits for retirees are provided by the payment of premiums from the fund. A pre-65 cost and lower post-65 cost (due to Medicare) were assumed such that the total rate for all retirees equals the present premium rate. These medical premiums are then increased with the health inflation assumption. The actuarial cost method used for funding retirement benefits is also used to fund health benefits.

TABLE 1

ALASKA TRS

TOTAL TURNOVER ASSUMPTIONS

Select Rates of Turnover
During the First 10 Years
of Employment

Ultimate Rates of Turnover
After the First 10 Years
of Employment

<u>Year of Employment</u>	<u>Rate</u>	<u>Ages</u>	<u>Rate</u>
1	.17	20-39	.03
2	.15	40+	.02
3	.12		
4	.12		
5	.11		
6	.09		
7	.07		
8	.07		
9	.07		
10	.06		

ALASKA TRS - DISABILITY RATES
ANNUAL RATES PER 1,000 EMPLOYEES

<u>Age</u>	<u>Rate</u>
20	.42
21	.43
22	.43
23	.44
24	.44
25	.45
26	.46
27	.47
28	.48
29	.49
30	.50
31	.52
32	.53
33	.54
34	.56
35	.58
36	.59
37	.62
38	.64
39	.67
40	.69
41	.72
42	.76
43	.82
44	.89
45	.97
46	1.06
47	1.15
48	1.24
49	1.34
50	1.44
51	1.56
52	1.72
53	1.91
54	2.13
55	2.40
56	2.75
57	3.20
58	3.66
59	4.32
60	5.06
61	5.85
62	6.78
63	7.83
64	8.94

TABLE 3
ALASKA TRS - RETIREMENT ASSUMPTION

<u>Age at Retirement</u>	<u>Retirement Assumption</u>
50	.063
51	.063
52	.063
53	.063
54	.063
55	.117
56	.117
57	.117
58	.117
59	.117
60	.260
61	.180
62	.210
63	.240
64	.270
65	.540
66	.820
67	1.000

For ages less than 50, teachers are assumed to retire two years after the earliest age they are eligible to retire.

Section 2.3
CALCULATION OF TOTAL CONTRIBUTION RATE

Normal Cost Rate

(1) Total Normal Cost*	\$ 65,050
(2) Total Salaries*	392,136
(3) Normal Cost Rate (1) / (2)	16.59%
(4) Average Member Contribution Rate	7.23%
(5) Consolidated Employer Normal Cost Rate, (3) - (4)	9.36%

Past Service Rate

(1) Present Value of Accrued Benefits*	\$1,115,773
(2) Valuation Assets*	1,040,173
(3) Total Unfunded Liability*, (1) - (2)	75,600
(4) Amortization Factor	10.706612
(5) Past Service Payment, (3) / (4)	7,061
(6) Total Salaries*	392,136
(7) Past Service Rate, (5) / (6)	1.80%

<u>Total Employer Contribution Rate</u>	11.16%
---	--------

* In thousands.

VAL2.6/js/jam

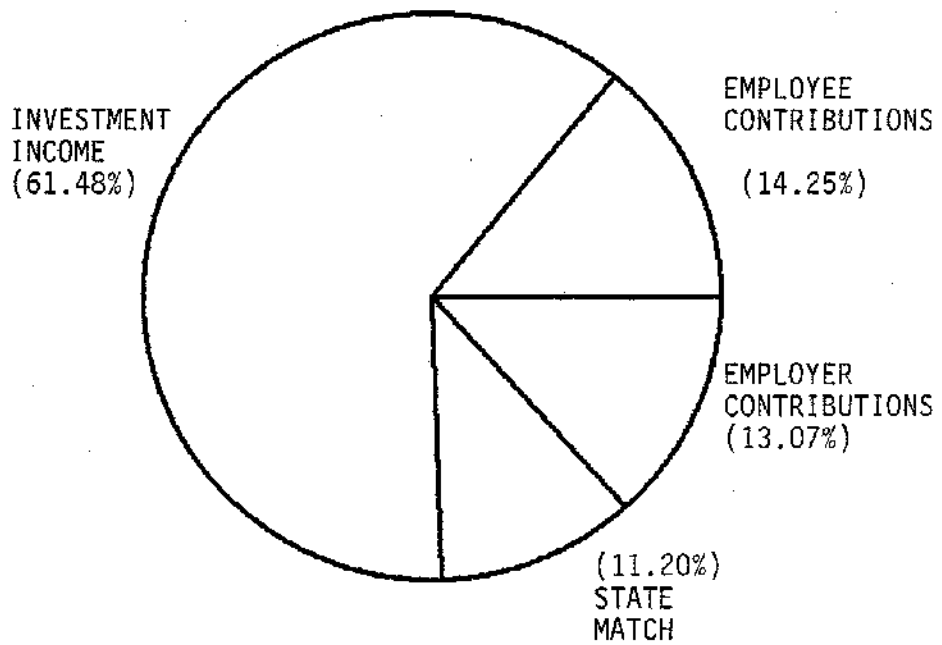
STATE OF ALASKA
TEACHERS' RETIREMENT FUND
Comparative Statement of Operations

	FISCAL YEAR ENDED	
	<u>June 30, 1987</u>	<u>June 30, 1986</u>
Beginning Equities and Reserves	\$1,141,650,155	\$ 866,333,672
Additions:		
Employees' Contributions:		
Mandatory	29,382,660	28,988,759
Supplemental	903,652	969,386
Reinstatement	453,773	302,682
Arrearage	1,361,827	1,160,803
Retroactive	51,236	30,335
Indebtedness Interest	<u>2,005,636</u>	<u>587,056</u>
Total Employees' Contributions	34,158,784	32,039,021
Employers' Contributions	31,320,495	36,637,019
State Contributions-Matching	26,856,301	32,638,698
Investment Income	147,105,977	119,172,931
Market Value Adjustment	(15,676,739)	103,643,000
Option I, Long Term Care, DVA, RIP Admin	<u>280,578</u>	<u>-0-</u>
Total Additions	<u>224,045,396</u>	<u>324,130,669</u>
Total Equities, Reserves and Additions	<u>1,365,695,551</u>	<u>1,190,464,341</u>
Deductions:		
Administrative Expenses		
Personnel Services	852,488	772,236
Travel and Moving	17,949	40,151
Contractual Services	287,719	321,916
Supplies and Materials	6,332	12,630
Machinery/Equipment	12,592	15,852
Grants/Interagency	<u>2,325,034</u>	<u>1,439,800</u>
Total Administrative Expenses	3,502,114	2,602,585
Employees' Contributions and Interest Refunded	4,238,873	3,311,113
Provision for Loan Loss	3,694,000	-0-
Medical Benefit Expenses	4,613,300	4,424,300

STATE OF ALASKA
TEACHERS' RETIREMENT FUND
Comparative Statement of Operations

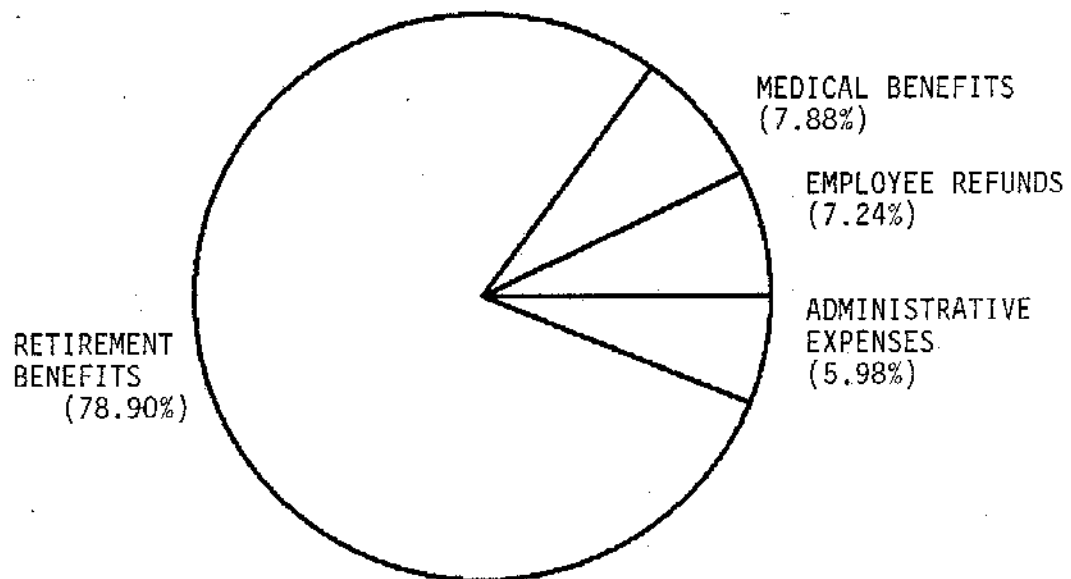
	<u>FISCAL YEAR ENDED</u>	
	<u>June 30, 1987</u>	<u>June 30, 1986</u>
Retirement Benefits Paid:		
Base Benefits	33,441,310	27,581,389
Cost of Living Allowance	2,391,373	1,941,998
Widow Annuity	457,763	389,560
Survivor Benefits	545,365	551,221
Disability Benefits	1,547,393	1,342,479
Post Retirement Pension Adjustment	7,739,475	6,563,789
Lump-Sum Benefits	13,560	61,807
Non-occupational Death Benefits	46,975	43,945
	<hr/>	<hr/>
Total Retirement Benefits	46,183,214	38,476,188
Total Deductions	62,231,501	48,814,186
	<hr/>	<hr/>
Ending Equities and Reserves-Adjusted	\$1,303,464,050	\$1,141,650,155
	<hr/>	<hr/>

STATE OF ALASKA
TEACHERS' RETIREMENT SYSTEM
YEAR ENDED JUNE 30, 1987
INCOME AND RECEIPTS
\$239,722,135



STATE OF ALASKA
TEACHERS' RETIREMENT SYSTEM
YEAR ENDED JUNE 30, 1987

DISBURSEMENTS
\$58,537,501

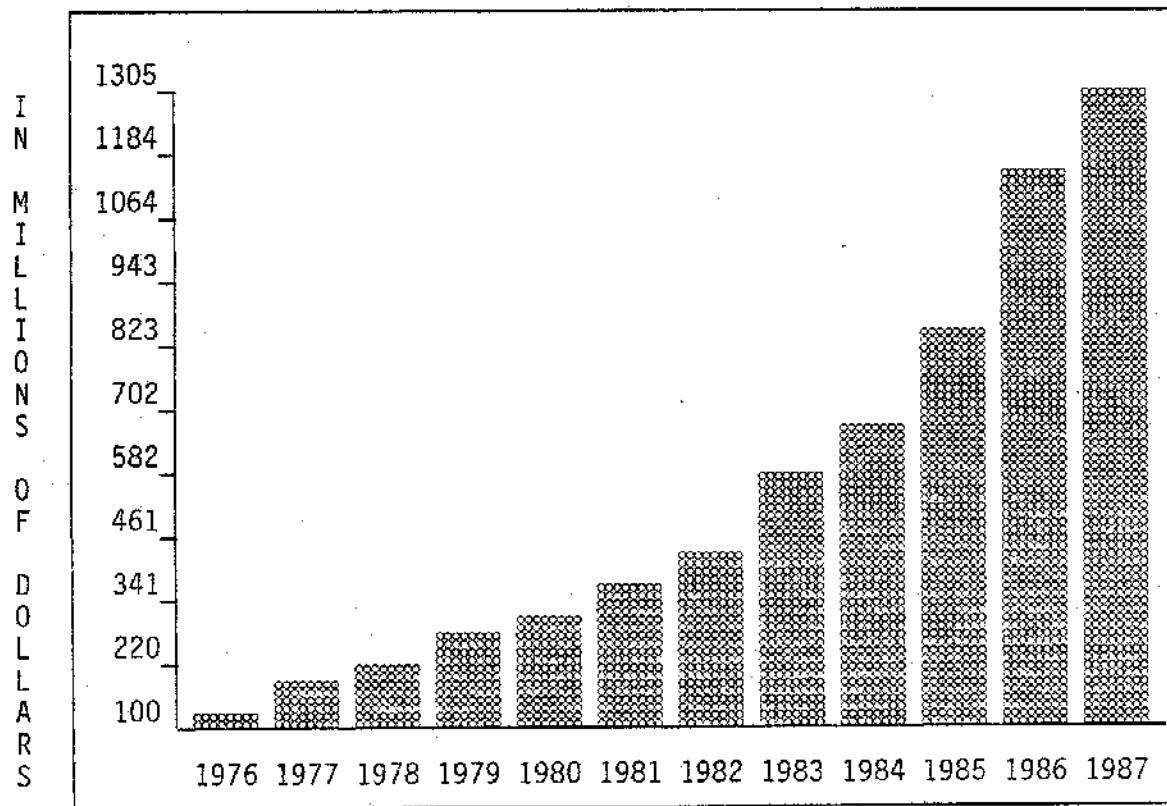


STATE OF ALASKA
TEACHERS' RETIREMENT FUND
Historical Data
Fiscal Years 1976 through 1987
(cents omitted)

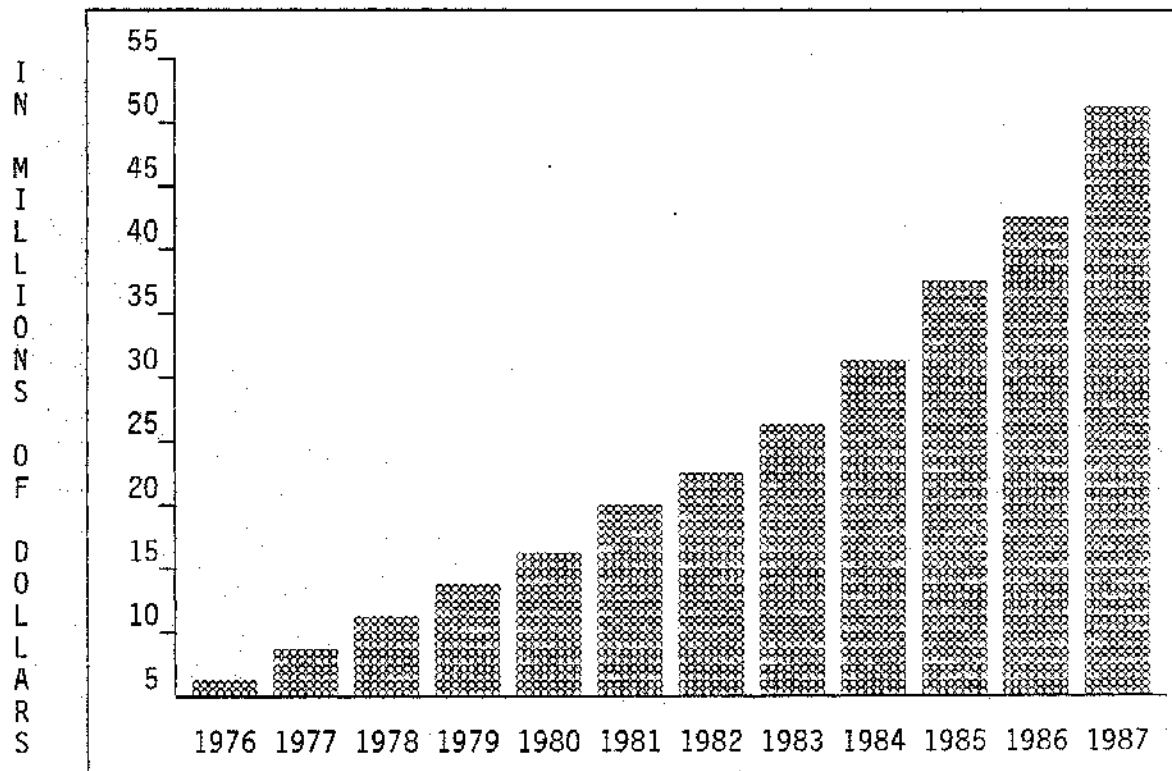
Fiscal Year	Assets Fiscal Year End	State of Alaska and Employers' Contributions During Fiscal Year	Employees' Contributions During Fiscal Year	Benefits Paid Including Medical Expenses & Death Benefits	Employees' Contributions and Interest Refunded During Fiscal Year	Net Investment Income During Fiscal Year
1976	137,623,382	19,348,436	11,590,177	6,390,012	1,926,611	9,240,962
1977	177,345,467	24,030,230	12,162,883	8,161,421	1,859,829	13,583,578
1978	215,370,551	19,792,849	15,510,483	11,025,589	2,319,376	16,051,252
* 1979	267,043,332	26,558,644	15,142,057	13,838,067	2,419,936	22,311,725
1980	320,314,293	31,243,171	16,650,594	16,462,399	3,087,910	31,783,301
1981	373,253,081	37,653,917	18,853,076	20,004,135	3,172,253	39,180,591
1982	443,528,571	50,856,750	21,735,042	22,881,444	2,974,426	30,900,759
1983	591,382,599	54,717,900	24,546,266	26,360,363	2,509,240	62,075,568
1984	659,572,326	63,315,499	27,256,918	31,048,570	3,094,220	60,586,110
1985	866,333,672	68,825,841	29,175,647	37,752,518	3,126,205	73,312,456
1986	1,141,650,155	69,275,717	32,039,021	42,900,488	3,311,113	119,172,931
1987	1,303,464,050	58,176,796	34,158,784	50,796,514	4,238,873	128,015,816

* Figures presented on an accrual basis effective FY 1979.

STATE OF ALASKA
TEACHERS' RETIREMENT FUND
TOTAL ASSETS
FISCAL YEARS 1976 THROUGH 1987



STATE OF ALASKA
TEACHERS' RETIREMENT FUND
BENEFITS PAID
FISCAL YEARS 1976 THROUGH 1987



STATE OF ALASKA
TEACHERS' RETIREMENT FUND
Employer Contribution Rates
Fiscal Year 1987

<u>Employer</u>	<u>Percentage</u>
Adak Region School District	6.88%
Alaska Gateway Schools	
Alaska, University of	
Alaska, University of, Geophysical Institute	
Aleutian Region School District	S
Anchorage School District	A
Annette Island School District	M
Association of Alaska School Boards	E
Bering Straits School District	
Bristol Bay Borough School District	F
Chatham School District	O
Chugach Regional School District	R
Copper River School District	
Cordova School District	A
Craig School District	L
Delta-Greely School District	L
Department of Education, State of Alaska	E
Dillingham School District	M
Fairbanks North Star Borough School District	P
Galena City School District	L
Haines City Schools	O
Hoonah City Schools	Y
Hydaburg City School District	E
Iditarod Area School District	R
Juneau Borough School District	S
Kake City Schools	
Kashunamiut School District	
Kenai Peninsula Borough School District	
Ketchikan Gateway Borough School District	
King Cove City School District	
Klawock City Schools	
Kodiak Island Borough School District	
Kuspuk School District	
Lake and Peninsula School District	
Lower Kuskokwim School District	
Lower Yukon School District	
Matanuska-Susitna Borough School District	
National Education Association	
Nenana City Public Schools	
Nome City Schools	
North Slope Borough School District	
Northwest Arctic School District	
Pelican School District	

STATE OF ALASKA
TEACHERS' RETIREMENT FUND
Employer Contribution Rates
Fiscal Year 1987

Continued

<u>Employer</u>	<u>Percentage</u>
Petersburg City Schools	6.88%
Pribilof Region School District	
Railbelt School District	
Sand Point City School District	
Sitka Borough School District	S
Skagway City School District	A
Southeast Islands School District	M
Southeast Regional Resource Center	E
Southwest Region School District	
Special Education Service Agency	
Saint Mary's School District	F
State Legislature	O
Tanana School District	R
Unalaska School District	
Valdez City Schools	A
Wrangell Public Schools	L
Yakutat School District	L
Yukon Flats School District	
Yukon Koyukuk School District	E
Yupit School District	M
	P
	L
	O
	Y
	E
	R
	S

INVESTMENTS

ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

SHORT TERM INVESTMENTS	Interest Rate	Maturity Date	Par Value	Cost	Market Value	Yield
Repurchase Agreement	6.45%	07-01-87	\$ 5,700	\$ 5,700	\$ 5,700	6.45%
TOTAL SHORT TERM INVESTMENTS			\$ 5,700	\$ 5,700	\$ 5,700	
UNITED STATES GOVERNMENT SECURITIES						
U.S. Treasury Bonds and Notes						
U.S. Treasury Bonds						
	10.37	11-15-09	\$60,000	\$67,313	\$68,250	9.12
	11.75	02-15-01	30,000	33,713	37,397	9.43
	13.12	05-15-01	5,000	5,759	6,772	9.69
	13.37	08-15-01	20,000	21,303	27,544	9.71
	14.25	02-15-02	30,000	38,287	43,706	9.78
	11.62	11-15-02	25,000	25,717	31,039	9.36
	10.75	05-15-03	30,000	34,734	35,044	9.20
	11.12	08-15-03	25,000	25,031	30,047	9.26
	12.00	08-15-13	50,000	71,358	65,094	9.22
	11.87	11-15-03	45,000	47,309	56,981	9.38
U.S. Treasury Notes						
	13.00	11-15-90	15,000	15,852	17,226	11.32
	14.25	11-15-91	15,000	16,319	18,408	11.61
	10.50	11/15-92	10,000	9,870	11,009	9.54
	10.87	02-15-93	20,000	20,794	22,387	9.72
	10.12	05-15-93	40,000	39,867	43,537	9.30
	11.75	11-15-88	10,000	9,969	10,572	11.11
	11.12	09-30-87	40,000	41,197	40,437	11.00
	11.75	11-15-93	14,000	14,376	16,367	10.05
	13.12	05-15-94	14,000	15,385	17,478	10.51
	11.00	11-15-87	55,000	56,470	55,842	10.83
	8.87	08-31-87	10,000	10,275	10,037	8.84
	8.87	10-31-87	70,000	71,107	70,459	8.82
TOTAL UNITED STATES GOVERNMENT SECURITIES			\$633,000	\$692,005	\$735,633	9.68

ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

(CONTINUED)

CORPORATE BONDS, NOTES, AND DEBENTURES	Interest Rate	Maturity Date	Par Value	Cost	Market Value	Yield
<u>Corporate/Industrial</u>						
Allied Signal Inc. Deb	9.87	06-01-02	\$ 6,000	\$ 5,946	\$ 6,058	9.78
Amoco Co Gtd Deb	9.87	02-01-16	6,000	6,256	6,098	9.72
Anheuser Busch Cos Inc Deb	11.87	10-01-12	8,000	8,898	8,770	10.83
Dayton Hudson Corp Deb	11.25	11-15-15	681	757	717	10.68
Dayton Hudson Corp Deb	9.25	11-15-16	9,000	8,909	8,235	10.11
K Mart Corp Deb	8.37	01-15-17	9,000	8,204	7,768	9.70
Mobil Corp Deb	14.40	06-15-04	15,000	16,037	16,650	12.97
Penny J C Inc	9.00	07-01-16	6,000	5,685	5,535	9.76
Pillsbury Co Deb	11.12	11-15-15	12,000	12,762	12,840	10.40
RJR Nabisco Inc Deb	8.62	03-15-17	6,000	5,279	5,317	9.73
Sears Roebuck & Co Deb	11.87	12-01-14	6,000	6,788	6,750	10.56
Total Industrial			\$83,681	\$85,521	\$84,738	10.70
<u>Corporate/Utility</u>						
Florida Pwr & Lt Co 1st Mtg	12.37	03-01-13	\$ 6,000	\$ 6,679	\$ 6,682	11.11
General Tel Co Calif 1st Mtg	9.37	06-15-26	6,000	5,985	5,661	9.94
Georgia Pac Corp Deb	9.25	03-15-16	6,000	5,767	5,760	9.64
Mountain Sts Tel & Teleg Co Deb	12.25	02-01-25	6,000	6,748	6,818	10.78
New York Tel Co Deb	12.25	12-01-24	6,000	6,773	6,787	10.83
Pacific Bell Deb	12.75	04-01-25	6,000	6,397	6,975	10.97
Pacific Gas & Elec Co 1st & Ret Mtg Ser	13.00	09-01-16	10,000	10,447	11,325	11.48
Pacific Tel & Teleg Co Deb	9.62	11-01-14	6,000	6,082	5,842	9.88
Public Svc Elec & Gas Co 1st & Ref Mtg S	12.12	12-01-12	5,932	6,531	6,570	10.95
Southern Calif Edison Co 1st & Ref Mtg S	13.00	03-15-15	6,000	6,563	6,923	11.27
Southwestern Bell Tel Co Deb	12.75	02-15-25	8,000	8,635	9,420	10.83
Texas Utils Elec Co 1st Mtg & Coll TR	12.87	04-01-15	8,000	8,650	8,940	11.52
Union Elec Co 1st Mtg	13.00	03-01-13	6,000	6,735	6,735	11.58
Total Utility			\$85,932	\$91,992	\$94,438	10.91
TOTAL CORPORATE BONDS, NOTES, AND DEBENTURES			\$169,613	\$177,513	\$179,176	

ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

(CONTINUED)

	<u>Interest Rate</u>	<u>Maturity Date</u>	<u>Shares/ Par Value</u>	<u>Carrying Value</u>	<u>Market Value</u>	<u>Yield</u>
<u>Commercial Paper/Finance</u>						
Ford Motor Credit Corp Note	6.80	07-14-87	\$10,000	\$10,000	\$10,000	6.80
Ford Motor Credit Corp Note	6.85	07-15-87	3,500	3,477	3,477	6.89
General Motors Accept Corp Note	6.70	07-06-87	5,000	5,000	5,000	6.70
General Motors Accept Corp Note	6.80	07-07-87	8,000	8,000	8,000	6.80
General Motors Accept Corp Note	6.92	07-10-87	2,000	1,984	1,984	6.98
Household Finance Corp Note	6.85	07-21-87	10,000	10,000	10,000	6.85
L & L Capital Corp Note	6.90	07-22-87	1,000	994	994	6.94
Two Rivers Capital Corp Note	6.93	07-07-87	1,000	994	994	6.97
United States Bancorp Note	6.75	07-07-87	2,500	2,470	2,470	6.83
Weyerhaeuser Mortgage Co Note	6.85	07-09-87	3,000	2,981	2,981	6.89
			\$46,000	\$45,900	\$45,900	
<u>Commercial Paper Industrial</u>						
EG & G Inc Note	6.85	07-14-87	\$ 2,000	\$ 1,987	\$ 1,987	6.90
Kroger Co Note	6.85	07-15-87	3,000	2,976	2,976	6.90
Olympia & York Wilshire Note	6.90	07-09-87	2,000	1,987	1,987	6.95
Pacific Telecom Inc Note	6.80	07-21-87	3,000	2,980	2,980	6.85
Total			\$10,000	\$ 9,930	\$ 9,930	
<u>Commercial Paper Pool</u>						
General Electric Credit Corp Master NT	6.34		\$ 1,900	\$ 1,900	\$ 1,900	6.35
General Electric Credit Corp Master NT	6.34		\$ 5,500	\$ 5,500	\$ 5,500	6.35
General Electric Credit Corp Master NT	6.34		\$ 7,100	\$ 7,100	\$ 7,100	6.35
Total			\$14,500	\$14,500	\$14,500	
<u>Commercial Paper/Other</u>						
Lake Erie Note	6.92	07-02-87	\$ 3,000	\$ 2,979	\$ 2,979	6.97
Mid Atlantic Fuel Co Note	6.87	07-29-87	1,300	1,292	1,292	6.92
Mid Atlantic Fuel Co Note	6.92	07-01-87	3,000	2,980	2,980	6.97
Penn Fuel Corp Note	6.87	07-29-87	4,200	4,173	4,173	6.92
Total			\$11,500	\$11,424	\$11,424	
TOTAL COMMERCIAL PAPER			\$82,000	\$81,754	\$81,754	

ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

(CONTINUED)

<u>Common Stock</u>	<u>Shares</u>	<u>Cost</u>	<u>Market</u>
Abbott Labs	92,500	\$ 5,132	\$ 5,770
Aetna Life and Casualty Company	41,900	2,365	2,493
Alco Standard Corporation	149,000	2,602	3,874
American Cyanamid Company	64,200	3,040	3,146
American Electric Power, Inc.	111,300	2,792	3,061
American General Corporation	87,000	2,676	3,447
American Greetings Corporation	39,600	974	1,030
American Home Products Corporation	43,700	2,764	3,720
American International Group, Inc.	92,900	5,958	6,584
American International Group, Inc.	51,600	2,181	3,657
American Standard, Inc.	80,000	2,633	3,390
Amoco Corporation	32,300	2,844	2,826
AMR Corporation Del	51,300	3,083	3,040
Anadarko Pete Corporation	17,700	329	524
Anheuser Busch Companies	83,400	2,175	2,836
Archer Daniels Midland Company	176,100	3,296	4,315
Atlantic Richfield Company	44,500	2,311	4,239
Avery International Corporation	55,600	1,401	1,390
Bankers Trust NY Corporation	63,100	2,930	3,218
Bankers Trust NY Corporation	113,900	5,301	5,809
Bank New York, Inc.	49,700	1,977	2,162
Boeing Company	75,500	3,424	3,539
Boise Cascade Corporation	27,600	1,914	2,008
Brunswick Corporation	166,000	3,810	3,984
Caterpillar, Inc.	49,200	2,807	2,632
Chase Manhattan Corporation	39,900	1,656	1,646
Chubb Corporation	83,100	5,188	5,111
Citicorp	29,500	1,567	1,741
Coca Cola Company	130,100	5,599	5,790
Commonwealth Edison Company	103,500	3,163	3,584
Community Psychiatric Centers	101,500	3,257	4,174
Consolidated Freightways, Inc.	111,750	2,388	4,079
Cooper Industries, Inc.	70,000	2,491	4,130
Corning Glass Works	67,200	3,761	4,301
CPC International, Inc.	71,400	1,518	3,891
CSX Corporation	57,700	1,856	2,012
Cummins Engine, Inc.	47,000	3,813	4,242
Dover Corporation	61,500	2,321	4,144
Dow Chemical Company	69,800	5,805	6,012
Dow Jones and Company, Inc.	80,700	4,047	4,136
E Sys Inc Com Par \$1	17,000	532	555
Exxon Corporation	16,300	1,404	1,520
Farmers Group, Inc.	71,100	2,870	3,200

ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

(CONTINUED)

<u>Common Stock</u>	<u>Shares</u>	<u>Cost</u>	<u>Market</u>
Federated Department Stores, Inc.	38,800	1,774	2,027
Federated Department Stores, Inc.	79,000	2,401	4,128
Ford Motor Company Del	56,300	4,860	5,574
Fort Howard Paper Company	71,000	3,917	3,807
Gannett, Inc.	110,800	5,334	5,651
Gencorp, Inc.	19,800	2,052	2,039
General Dynamics Corporation	60,100	4,312	4,012
General Electric Company	117,000	4,323	6,362
General Electric Company	68,200	2,157	3,708
General Motors Corporation	42,500	3,078	3,512
General Motors Corporation	62,100	5,287	5,131
General RE Corporation	54,800	2,136	2,973
Gillette Company	72,700	2,072	2,772
GTE Corporation	156,300	5,373	6,018
Hanson TR PLC Sponsored ADR	250,000	3,560	3,594
Hewlett Packard Company	72,500	2,528	4,432
Honeywell, Inc.	38,300	3,024	3,160
Hospital Corporation Amer	58,700	2,083	2,722
Houston Industries, Inc.	117,000	4,170	3,890
International Business Machines Corp.	49,800	7,396	8,093
International Business Machines Corp.	23,700	3,056	3,851
International Business Machines Corp.	43,300	6,384	7,036
International Minerals & Chemical Corp.	72,700	2,657	3,035
ITT Corporation	100,000	4,975	5,875
Johnson and Johnson	41,700	2,706	3,831
K Mart Corporation	82,500	2,639	3,486
Kroger Company	59,900	1,866	2,201
Lilly Eli and Company	41,100	1,459	3,858
Lockheed Corporation	75,000	3,736	3,872
Manor Care, Inc.	190,000	3,498	3,515
Mapco, Inc.	67,500	2,407	3,696
Marion Laboratories, Inc.	108,900	3,579	3,920
Marriott Corporation	133,800	5,504	5,235
Marsh and McLennan Companies, Inc.	37,700	2,452	2,342
McDonalds Corporation	76,125	2,194	4,035
McDonalds Corporation	39,000	1,754	2,067
Melville Corporation	49,500	2,224	3,632
Merck and Company, Inc.	23,000	1,315	3,922
Merck and Company, Inc.	42,000	4,593	7,161
Minnesota Mining and Manufacturing Company	54,000	3,427	3,827
Minnesota Mining and Manufacturing Company	60,000	2,688	4,253
Mobil Corporation	117,700	5,743	5,988
Morgan, J.P. and Company, Inc.	73,400	3,087	3,514

ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

(CONTINUED)

<u>Common Stock</u>	<u>Shares</u>	<u>Cost</u>	<u>Market</u>
Morgan Stanley Group, Inc.	20,800	1,510	1,505
Morton Thiokol, Inc.	46,200	1,684	2,056
Motorola, Inc.	107,800	6,072	5,835
National Distillers and Chemical Corp.	57,600	3,773	3,910
NCR Corporation	54,000	2,136	4,023
NCR Corporation	74,100	4,074	5,521
Newmont Mng. Corporation	7,900	349	372
New York Times Company	68,100	2,803	3,201
Norsk Hydro Sponsored ADR	140,000	2,974	4,480
Northern Industries Public Service Company	132,500	1,578	1,557
Occidental Pete Corporation	111,100	3,913	4,180
Ohio Gas Corporation	79,400	2,666	3,514
Pacific Lighting Corporation	26,200	1,321	1,438
Penney, J.C., Inc.	29,600	1,112	1,554
Penney, J.C., Inc.	109,400	5,632	5,744
Pepsico, Inc.	85,400	2,523	3,074
Philip Morris Companies, Inc.	39,700	2,734	3,558
Philip Morris Companies, Inc.	24,700	1,734	2,214
Pillsbury Company	74,300	2,654	3,223
Polaroid Corporation	106,000	3,290	4,068
Procter and Gamble Company	9,100	621	892
Procter and Gamble Company	41,500	2,509	4,067
Public Service Enterprise Group, Inc.	103,200	4,106	3,922
Raytheon Company	49,000	2,328	3,700
Royal Dutch Pete Co. NY Registry Sh Par	31,000	3,486	4,092
Salomon, Inc.	97,000	3,980	3,189
Schering Plough Corporation	114,800	4,108	5,582
Schlumberger Ltd. Company	86,000	2,995	3,935
Seagram, Ltd.	41,900	3,108	3,158
Sears Roebuck and Company	115,500	4,875	5,847
Smithkline Beckman Corporation	27,400	1,304	1,637
Southwest Bell Corporation	107,000	3,625	4,160
Squibb Corporation	63,800	5,361	5,535
St. Paul Companies, Inc.	87,900	3,608	4,021
Sterling Drug, Inc.	53,200	2,548	3,052
Stevens, J.P. and Company, Inc.	65,800	2,787	2,821
Tandy Corporation	25,400	1,329	1,095
Tektronix, Inc.	65,000	2,249	2,519
Texaco, Inc.	44,700	1,550	1,810
Texas Eastn Corporation	96,800	3,350	3,533
Texas Instruments, Inc.	96,600	5,424	5,917
Textron, Inc.	113,000	2,998	3,432
Transco Energy Company	33,700	1,270	1,226

ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

(CONTINUED)

<u>Common Stock</u>	<u>Shares</u>	<u>Cost</u>	<u>Market</u>
Triangle Industries, Inc.	146,600	4,392	5,278
Union Carbide Corporation	110,900	2,811	3,285
Unisys Corporation	15,900	1,573	1,960
Unisys Corporation	26,300	3,070	3,242
United Technologies Corporation	109,500	4,959	5,721
United Telecommunications, Inc., Kans	78,700	2,084	2,154
Upjohn Company	125,900	4,982	5,697
USX Corporation	132,900	3,360	4,186
Walmart Stores, Inc.	54,200	2,392	3,665
Wang Laboratories, Inc., CL-B	97,400	1,544	1,546
Waste Management, Inc.	142,700	4,639	5,601
Wells Fargo and Company	34,000	1,632	1,849
Westinghouse Electric Corporation	51,100	3,075	3,251
Whirlpool Corporation	96,000	2,430	3,420
Xerox Corporation	35,900	2,855	2,773
 Total Common Stock		439,574	522,508
 Income and Principal Cash		669	669
 Total		<u>\$521,997</u>	<u>\$604,931</u>

ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

(CONTINUED)

	<u>Cost</u>	<u>Market</u>
<u>Foreign Investments Managed By</u>		
Morgan Guaranty Trust Equities	<u>\$ 87,052</u>	<u>\$ 99,493</u>
Citibank Equities	<u>78,511</u>	<u>103,907</u>
Total Foreign Investments	<u>\$165,563</u>	<u>\$203,400</u>
 <u>Real Estate Equity Fund</u>	 <u>\$110,673</u>	 <u>\$117,480</u>
Total Real Estate Equity Fund	<u>\$110,673</u>	<u>\$117,480</u>

ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

(CONTINUED)

Real Estate Mortgages
and SBA Loans

	<u>Interest Rate Range</u>	<u>Out- Standing Cost</u>	<u>Weighted Average Yield</u>
<u>SBA Loans Services By</u>			
Alaska Mutual Bank	9.50	\$ 33	9.50
First National Bank of Fairbanks	15.75	440	15.75
National Bank of Alaska	8.00 - 10.50	57	8.16
Rainier Bank Alaska	8.00	5	8.00
Total SBA Loans		<u>\$535</u>	

Bureau of Indian Affairs
Serviced By

National Bank of Alaska	10.50	<u>\$917</u>	10.50
-------------------------	-------	--------------	-------

Farmers Home Administration Loan
Serviced By

National Bank of Alaska	9.75	<u>\$1,368</u>	9.75
-------------------------	------	----------------	------

Conventional/Residential Mortgages
Serviced By

Alaska Continental Bank	13.50 - 14.50	1,914	13.77
Alaska Federal Savings and Loan	7.00 - 16.50	2,882	12.48
Alaska Mutual Savings Bank	9.37 - 15.25	5,874	11.09
Alaska National Bank	9.37 - 14.50	6,296	10.29
Alaska Pacific Bank	9.37 - 15.00	7,000	11.97
Alaska Statebank	9.37 - 16.75	12,967	11.13
Arctic First Federal Savings & Loan	10.50 - 11.75	728	10.88
FedAlaska Federal Credit Union	13.50 - 14.50	1,079	14.19
First Alaskan Mortgage	9.25 - 15.12	226	12.15
First Bank	9.37 - 14.50	973	11.13
First Federal Bank of Alaska	9.87 - 15.50	7,493	13.58
First Interstate Bank of Alaska	8.00 - 16.75	2,749	13.39
First National Bank of Anchorage	9.25 - 16.50	15,355	11.35

ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1986

(IN THOUSANDS)

(CONTINUED)

Real Estate Mortgages
and SBA Loans - Continued:

	<u>Interest Rate Range</u>	<u>Out- Standing Cost</u>	<u>Weighted Average Yield</u>
* First National Bank of Fairbanks	9.87 - 15.50	\$ 3,746	12.93
Home Savings and Loan	9.50 - 13.50	7,031	10.82
Key Pacific Mortgage Company	13.50 - 14.50	6,056	13.87
Kissell Mortgage Company	9.50 - 17.00	31,891	12.84
Lomas and Nettleton Company	13.50 - 14.00	375	13.58
National Bank of Alaska	10.50 - 16.00	1,686	12.55
Peoples Mortgage Company	10.25 - 10.50	659	10.31
Peninsula Savings and Loan	11.50 - 15.50	508	14.61
Rainier Bank Alaska	9.50 - 11.00	1,252	10.40
Seafirst Corporation	9.25 - 14.87	8,920	10.78
Security National Bank	11.50 - 16.75	<u>3,738</u>	14.22

Total Conventional/Residential
Mortgages

\$131,398

* This is now under Key Pacific Mortgage Company

FHA Mortgages Serviced By

Alaska Mutual Bank	6.75 - 8.50	\$ 279	7.75
Alaska National Bank	7.50 - 8.50	104	8.14
Alaska Pacific Bank	11.50	220	11.50
Alaska State Bank	5.25 - 10.50	878	7.41
First National Bank of Anchorage	5.25 - 9.00	827	7.63
National Bank of Alaska	5.25 - 8.50	568	7.17
Rainier Financial Services	5.75 - 7.50	475	6.92
Washington Mortgage Company	7.00	<u>778</u>	7.00

Total FHA Mortgages

\$ 4,129

Total Real Estate Mortgages
and SBA Loans before allowance

\$138,347

Allowance for loan losses

4,221

Total Real Estate Mortgages and
SBA Loans After Allowance

\$134,126

ALASKA TEACHERS' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

SHORT-TERM INVESTMENTS	Interest Rate	Maturity Date	Shares/ Par Value	Carrying Value	Market Value	Yield
Repurchase Agreements	6.45	07-01-87	\$ 2,800	\$ 2,800	\$ 2,800	6.45
Total Short Term Investments			\$ 2,800	\$ 2,800	\$ 2,800	
UNITED STATES GOVERNMENT SECURITIES						
U.S. Treasury Bonds and Notes						
U.S. Treasury Bonds	10.37	11-15-09	\$40,000	\$44,875	\$45,500	9.12
	11.75	02-15-01	15,000	16,856	18,698	9.43
	13.37	08-15-01	13,000	13,787	17,903	9.71
	14.25	02-15-02	20,000	25,525	29,137	9.78
	11.62	11-15-02	25,000	25,717	31,039	9.36
	10.75	05-15-03	15,000	17,925	17,522	9.20
	11.12	08-15-03	15,000	15,019	18,028	9.26
	12.00	08-15-13	25,000	35,818	32,547	9.22
	11.87	11-15-03	37,000	38,857	46,851	9.38
U.S. Treasury Notes	13.00	11-15-90	15,000	15,852	17,227	11.32
	14.25	11-15-91	15,000	16,319	18,408	11.61
	10.87	02-15-93	10,000	10,400	11,194	9.72
	10.12	05-15-93	20,000	19,886	21,769	9.30
	11.75	11-15-88	10,000	10,047	10,572	11.11
	11.12	09-30-87	15,000	15,595	15,164	11.00
	11.75	11-15-93	14,000	14,376	16,367	10.05
	13.12	05-15-94	14,000	15,385	17,478	10.51
	11.00	11-15-87	20,000	20,334	20,306	10.83
	8.87	10-31-87	40,000	40,643	40,262	8.82
TOTAL UNITED STATES GOVERNMENT SECURITIES			\$378,000	\$413,216	\$445,972	9.72

ALASKA TEACHERS' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

(CONTINUED)

CORPORATE BONDS, NOTES, AND DEBENTURES	Interest Rate	Maturity Date	Par Value	Cost	Market Value	Yield
<u>Corporate/Industrial</u>						
Allied Signal Inc. Deb	9.87	06-01-02	\$ 4,000	\$ 3,964	\$ 4,039	9.78
Amoco Co Ctd Deb	9.87	02-01-16	4,000	4,170	4,065	9.72
Anheuser Busch Cos Inc Deb	11.87	10-01-12	5,000	5,558	5,481	10.83
Conoco Inc Deb	13.25	01-15-11	4,000	4,250	4,475	11.84
Dayton Hudson Corp Deb	11.25	11-15-15	426	474	449	10.68
Dayton Hudson Corp Deb	9.25	11-15-16	6,000	5,939	5,490	10.11
K Mart Corp Deb	8.37	01-15-17	6,000	5,469	5,179	9.70
Mobil Corp Deb	14.40	06-15-04	10,000	10,744	11,100	12.97
Penney J C Inc	9.00	07-01-16	4,000	3,790	3,690	9.76
Pillsbury Co Deb	11.12	11-15-15	8,000	8,508	8,560	10.40
RJR Nabisco Inc Deb	8.62	03-15-17	4,000	3,520	3,545	9.73
Sears Roebuck & Co Deb	11.87	12-01-14	4,000	4,525	4,500	10.56
Total			\$59,426	\$60,911	\$60,573	10.70
<u>Corporate/Utility</u>						
General Tel Co Calif 1st Mtg	9.37	06-15-26	4,000	3,990	3,774	9.94
Georgia Pac Corp Deb	9.25	03-15-16	4,000	3,845	3,840	9.64
Mountain Sts Tel & Teleg Co Deb	12.25	02-01-25	4,000	4,499	4,545	10.78
New York Tel Co Deb	12.25	12-01-24	4,000	4,515	4,525	10.83
Pacific Bell Deb	12.75	04-01-25	4,000	4,265	4,650	10.97
Pacific Gas & Elec Co 1st & Ret Mtg Ser	13.00	09-01-16	6,000	6,168	6,795	11.48
Pacific Tel & Teleg Co Deb	9.62	11-01-14	4,000	4,055	3,895	9.88
Public Svc Elec & Gas Co 1st & Ref Mtg S	12.12	12-01-12	3,954	4,316	4,379	10.95
Southern Calif Edison Co 1st & Ref Mtg S	13.00	03-15-15	4,000	4,375	4,615	11.27
Southwestern Bell Tel Co Deb	12.75	02-15-25	5,000	5,386	5,887	10.83
Texas Util's Elec Co 1st Mtg & Coll TR	12.87	04-01-15	4,000	4,444	4,470	11.52
Union Elec Co 1st Mtg	13.00	03-01-13	4,000	4,490	4,490	11.58
Total			\$50,954	\$54,348	\$55,865	10.91
TOTAL BONDS, NOTES, AND DEBENTURES			\$110,380	\$115,259	\$116,438	

ALASKA TEACHERS' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

(CONTINUED)

	Interest Rate	Shares/ Maturity Date	Carrying Par Value	Value	Market Value	Yield
<u>Commercial Paper/Finance</u>						
Ford Motor Credit Corp Note	6.80	07-14-87	\$6,000	\$6,000	\$6,000	6.80
Ford Motor Credit Corp Note	6.85	07-15-87	2,500	2,484	2,484	6.89
General Motors Accept Corp Note	6.80	07-07-87	5,000	5,000	5,000	6.80
General Motors Accept Corp Note	6.70	07-06-87	1,000	1,000	1,000	6.70
General Motors Accept Corp Note	6.92	07-10-87	2,000	1,984	1,984	6.98
Household Finance Corp Note	6.85	07-21-87	5,000	5,000	5,000	6.85
L & L Capital Corp Note	6.90	07-22-87	1,000	994	994	6.94
United States Bancorp Note	6.75	07-07-87	3,000	2,965	2,965	6.83
Weyerhaeuser Mortgage Co Note	6.85	07-09-87	1,000	993	993	6.89
			\$26,500	\$26,420	\$26,420	
<u>Commercial Paper Industrial</u>						
EG & G Inc Note	6.85	07-14-87	\$ 2,000	\$ 1,987	\$ 1,987	6.90
Worstar Bancorp Inc Note	6.90	07-10-87	1,000	993	993	6.95
Total			\$ 3,000	\$ 2,980	\$ 2,980	
<u>Commercial Paper Pool</u>						
General Electric Credit Corp Master NT	6.34		\$ 5,800	\$ 5,800	\$ 5,800	6.35
General Electric Credit Corp Master NT	6.34		5,600	5,600	5,600	6.35
General Electric Credit Corp Master NT	6.34		1,200	1,200	1,200	6.35
Total			\$12,600	\$12,600	\$12,600	
<u>Commercial Paper/Other</u>						
Lake Erie Note	6.92	07-02-87	\$ 2,000	\$ 1,986	\$ 1,986	6.97
Maumee Valley Fuel Corp Note	6.87	07-29-87	1,000	993	993	6.92
Mid Atlantic Fuel Co Note	6.92	07-01-87	3,000	2,980	2,980	6.97
Ohio Edison Fuel Corp Note	6.87	07-21-87	2,000	1,987	1,987	6.92
Penna Power & Light Energy Trust Note	6.90	07-01-87	3,000	2,985	2,985	6.93
Total			\$11,000	\$10,931	\$10,931	
TOTAL COMMERCIAL PAPER			\$53,100	\$52,931	\$52,931	

ALASKA TEACHERS' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

(CONTINUED)

<u>Common Stock</u>	<u>Shares</u>	<u>Cost</u>	<u>Market</u>
Abbot Labs	60,400	\$ 3,289	\$3,767
Aetna Life and Casualty Company	27,300	1,542	1,624
Alco Standard Corporation	102,000	1,802	2,652
American Cyanamid Company	40,600	1,923	1,989
American Electric Power, Inc.	73,500	1,843	2,021
American General Corporation	56,000	2,006	2,219
American Greetings Corporation	26,200	644	681
American Home Products Corporation	29,000	1,853	2,469
American International Group, Inc.	60,500	3,879	4,288
American International Group, Inc.	34,300	1,475	2,431
American Standard, Inc.	49,600	1,562	2,102
Amoco Corporation	21,700	1,817	1,899
Anadarko Pete Corporation	11,600	215	344
Anheuser Busch Companies, Inc.	54,100	1,395	1,839
Archer Daniels Midland Company	114,800	2,149	2,813
Atlantic Richfield Company	29,000	1,509	2,762
Avery International Corporation	36,000	907	900
Bank New York, Inc.	32,400	1,289	1,409
Bankers Trust New York Corporation	41,100	1,907	2,096
Bankers Trust New York Corporation	74,600	3,622	3,805
Boeing Company	47,600	2,150	2,231
Bosie Cascade Corporation	18,300	1,269	1,331
Brunswick Corporation	159,600	3,625	3,830
Burlington Northern, Inc.	24,300	1,812	2,011
Chase Manhattan Corporation	26,000	1,079	1,073
Chubb Corporation	54,800	3,421	3,370
Citicorp	19,300	1,025	1,139
Coco Cola Company	84,100	3,621	3,742
Commonwealth Edison Company	64,600	1,950	2,237
Community Psychiatric Centers	61,000	1,952	2,509
Consolidated Freight Ways, Inc.	72,050	1,490	2,630
Cooper Industries, Inc.	43,500	1,568	2,567
Corning Glass Works	43,700	2,442	2,797
CPC International, Inc.	47,000	1,001	2,562
CSX Corporation	37,600	1,209	1,311
Cummins Engine, Inc.	29,500	2,393	2,662
Dover Corporation	40,400	1,525	2,722
Dow Chemical Company	44,700	3,748	3,850
Dow Jones and Company, Inc.	64,900	3,219	3,326
E Sys Com par \$1	11,200	351	365
Farmers Group, Inc.	46,900	1,892	2,111
Federated Department Stores, Inc.	49,500	1,584	2,586
Federated Department Stores, Inc.	25,300	1,156	1,322
Ford Motor Company Del	39,600	3,319	3,920

ALASKA TEACHERS' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

(CONTINUED)

<u>Common Stock</u>	<u>Shares</u>	<u>Cost</u>	<u>Market</u>
Fort Howard Paper Company	47,000	2,596	2,520
Gannett, Inc.	75,700	3,613	3,861
Gencorp, Inc.	12,900	1,337	1,329
General Dynamics Corporation	39,200	2,815	2,617
General Electric Company	44,800	1,406	2,436
General Electric Company	77,200	2,855	4,198
General Motors Corporation	31,000	2,256	2,561
General Motors Corporation	21,100	1,916	1,743
General RE Corporation	36,800	1,434	1,996
Gillette Company	47,400	1,353	1,807
GTE Corporation	101,900	3,488	3,923
Hanson TR PLC Sponsored ADR	160,000	2,279	2,300
Hershey Foods Corporation	98,600	2,608	2,761
Hewlett Packard Company	43,200	1,520	2,641
Honeywell, Inc.	23,400	1,848	1,931
Hospital Corporation America	38,700	1,370	1,795
Houston Industries, Inc.	76,300	2,722	2,537
International Business Machines Corporation	17,000	2,174	2,763
International Business Machines Corporation	32,500	4,810	5,281
International Business Machines Corporation	29,700	4,413	4,826
International Minerals and Chemicals Corp.	46,300	1,709	1,933
ITT Corporation	66,000	3,293	3,878
Johnson and Johnson	27,200	1,757	2,499
K Mart Corporation	53,900	1,717	2,277
Kroger Company	40,000	1,246	1,470
Lilly Eli and Company	27,300	1,002	2,563
Lockheed Corporation	46,000	2,290	2,375
Manor Care, Inc.	120,000	2,209	2,220
Mapco, Inc.	44,000	1,565	2,409
Marion Laboratories, Inc.	52,900	1,804	1,904
Marriott Corporation	86,700	3,502	3,392
Marsh and McLennan Companies, Inc.	24,500	1,596	1,522
McDonalds Corporation	45,000	1,351	2,385
McDonalds Corporation	3,750	168	199
MDC Holdings, Inc.	73,800	1,184	876
Melville Corporation	32,900	1,627	2,414
Merck and Company, Inc.	15,000	712	2,558
Merck and Company, Inc.	26,900	2,646	4,586
Minnesota Mining and Manufacturing Company	37,400	1,720	2,651
Minnesota Mining and Manufacturing Company	35,200	2,234	2,495
Mobil Corporation	40,900	2,007	2,081
Morgan J.P. and Company, Inc.	48,300	2,032	2,312
Morgan Stanley Group, Inc.	20,000	1,452	1,448

ALASKA TEACHERS' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

(CONTINUED)

<u>Common Stock</u>	<u>Shares</u>	<u>Cost</u>	<u>Market</u>
Morton Thiokol, Inc.	30,500	1,115	1,357
Motorola, Inc.	69,000	3,971	3,735
NCR Corporation	35,500	1,442	2,645
NCR Corporation	52,200	3,017	3,889
Newmont Mining Corporation	5,100	226	240
New York Times Company CLA	18,400	761	865
Norsk Hydro Sponsored ADR	92,000	1,932	2,944
Northern Industries Public Service Company	83,000	990	975
Occidental Pete Corporation	76,300	2,526	2,871
Ohio Casualty Corporation	56,300	1,911	2,491
Pacific Lighting Corporation	17,300	872	949
Penney, J.C., Inc.	19,300	725	1,013
Penney, J.C., Inc.	37,600	1,786	1,974
Pepsico, Inc.	55,700	1,647	2,005
Pepsico, Inc.	104,300	3,365	3,755
Philip Morris Companies, Inc.	25,900	1,796	2,321
Philip Morris Companies, Inc.	15,300	1,074	1,371
Pillsbury Company	48,900	1,746	2,121
Polaroid Corporation	49,200	1,502	1,888
Proctor and Gamble Company	27,900	1,739	2,734
Proctor and Gamble Company	5,900	403	578
Public SVC Enterprise Group, Inc.	67,300	2,679	2,557
Raytheon Company	32,800	1,583	2,476
Raytheon Company	20,000	1,244	1,510
Royal Dutch Pete Co., New York Registry	20,500	2,305	2,706
Salomon, Inc.	58,500	2,269	1,923
Schering Plough Corporation	90,000	3,396	4,376
Schlumberger Limited	56,900	1,985	2,603
Sears, Roebuck and Company	76,200	3,224	3,858
Smithkline Beckman Coporation	17,800	848	1,064
Southwestern Bell Corporation	69,800	2,359	2,714
St. Paul Cos., Inc.	57,300	2,382	2,622
Sterling Drug, Inc.	35,100	1,680	2,014
Squibb Corporation	41,000	3,430	3,557
Tektronix, Inc.	42,300	1,464	1,639
Texaco, Inc.	28,800	995	1,166
Texas Eastn Corporation	63,100	2,183	2,303
Texas Instruments, Inc.	64,500	3,676	3,951
Textron, Inc.	73,600	1,956	2,236
Transco Energy Company	21,900	825	797
Triangle Industries, Inc.	47,800	1,463	1,721
TRW, Inc.	73,600	3,697	3,873
Union Carbide Corporation	72,300	1,830	2,142

ALASKA TEACHERS' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

(CONTINUED)

<u>Common Stock</u>	<u>Shares</u>	<u>Cost</u>	<u>Market</u>
Unisys Corporation	10,500	1,039	1,294
United Technologies Corporation	71,400	3,234	3,731
United Telecommunications, Inc., Kans Com	51,300	1,357	1,404
Upjohn Company	77,500	3,376	3,507
USX Corporation	86,600	2,382	2,728
USX Corporation	56,100	1,842	1,767
Wang Laboratories, Inc., CIB	64,300	1,020	1,021
Wang Laboratories, Inc., CIB	113,900	1,934	1,808
Wal Mart Stores, Inc.	21,000	927	1,420
Washington Post Company, CIB	9,500	1,815	2,090
Waste Management, Inc.	92,700	2,881	3,638
Wells Fargo and Company	22,200	1,065	1,207
Westinghouse Electric Corporation	29,900	1,808	1,902
Whirlpool Corporation	65,000	1,683	2,316
Xerox Corporation	23,300	1,811	1,800
Total Common Stock	7,050	285,258	338,749
Income and Principal Cash		<u>921</u>	<u>921</u>
Total		<u>\$339,110</u>	<u>\$392,601</u>

ALASKA TEACHERS' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

(CONTINUED)

	<u>Cost</u>	<u>Market</u>
<u>Foreign Investments Managed By</u>		
Morgan Guaranty Trust Equities	<u>\$57,614</u>	<u>\$66,338</u>
Citibank Equities	<u>51,774</u>	<u>68,082</u>
Total Foreign Investments	<u>\$109,388</u>	<u>\$134,420</u>
 <u>Real Estate Equity Fund</u>	 <u>\$71,032</u>	 <u>\$75,598</u>
Total Real Estate Equity Fund	<u>\$71,032</u>	<u>\$75,598</u>

ALASKA TEACHERS' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

(CONTINUED)

Real Estate Mortgages
and SBA Loans

	<u>Interest Rate Range</u>	<u>Out- Standing Cost</u>	<u>Weighted Average Yield</u>
<u>SBA Loans Services By</u>			
National Bank of Alaska	8.00	<u>\$104</u>	8.00
Total SBA Loans		<u>\$104</u>	
<u>Farmers Home Administration Loan Serviced By</u>			
First Interstate Bank of Alaska	12.75	<u>\$628</u>	12.75
Total Farmers Home Administration Loan		<u>\$628</u>	
<u>Conventional/Residential Mortgages Serviced By</u>			
Alaska Federal Savings and Loan	10.50	\$ 754	10.50
Alaska First Mortgage Company	10.00 - 12.75	2,622	11.49
Alaska Mutual Bank	8.00 - 16.00	12,710	12.39
Alaska National Bank	10.50 - 14.50	1,207	11.87
Alaska Pacific Bank	11.25	71	11.25
Alaska USA Federal Credit Union	10.12 - 11.00	1,083	10.73
B.M. Behrends Bank	7.75 - 16.75	6,261	13.40
Commonwealth Western Mortgage Corp	12.50	345	12.50
First Interstate Bank of Alaska	9.50 - 17.50	19,102	12.23
Home Savings and Loan	10.25	475	10.25
Kissell Mortgage Company	8.00 - 16.25	12,359	12.86
Mt. McKinley Mutual Savings Bank	9.25 - 14.87	2,731	11.10
National Bank of Alaska	8.00 - 17.50	24,690	11.78
Peoples Mortgage Company	10.25 - 10.50	659	10.31
Rainier Bank of Alaska	9.50 - 16.25	4,593	11.23
United Bank Alaska	9.37 - 16.75	18,875	12.36
Verex Mortgage Company	12.00 - 17.75	<u>3,786</u>	14.50
Total Conventional/Residential Mortgages		<u>\$112,323</u>	

ALASKA TEACHERS' RETIREMENT SYSTEM

SCHEDULE OF INVESTMENTS HELD AT

JUNE 30, 1987

(IN THOUSANDS)

(CONTINUED)

Real Estate Mortgages
and SBA Loans - Continued:

	<u>Interest Rate Range</u>	<u>Out- Standing Cost</u>	<u>Weighted Average Yield</u>
<u>FHA Mortgages Serviced By</u>			
Alaska Mutual Bank	6.00 - 8.50	\$ 370	7.64
Alaska National Bank	5.75	11	5.75
Alaska State Bank	5.25 - 8.50	411	6.78
First National Bank of Anchorage	5.25 - 8.50	1,063	7.99
National Bank of Alaska	6.00 - 7.50	817	6.97
Rainier Bank Alaska	7.50	22	7.50
Rainier Mortgage Company	5.25 - 8.50	366	7.72
Total FHA Mortgages		<u>\$ 3,060</u>	
Total Real Estate Mortgages and SBA Loans Before Allowance		<u>\$116,115</u>	
Allowance for Loan Losses		<u>\$ 3,694</u>	
Total Real Estate Mortgages and SBA Loans After Allowance		<u>\$112,421</u>	

